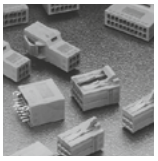
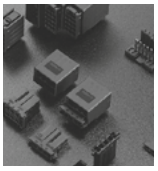
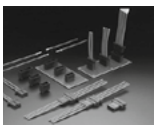
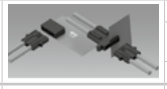
# DYNAMIC SERIES CONNECTORS

2024 Edition

RoHS Ready



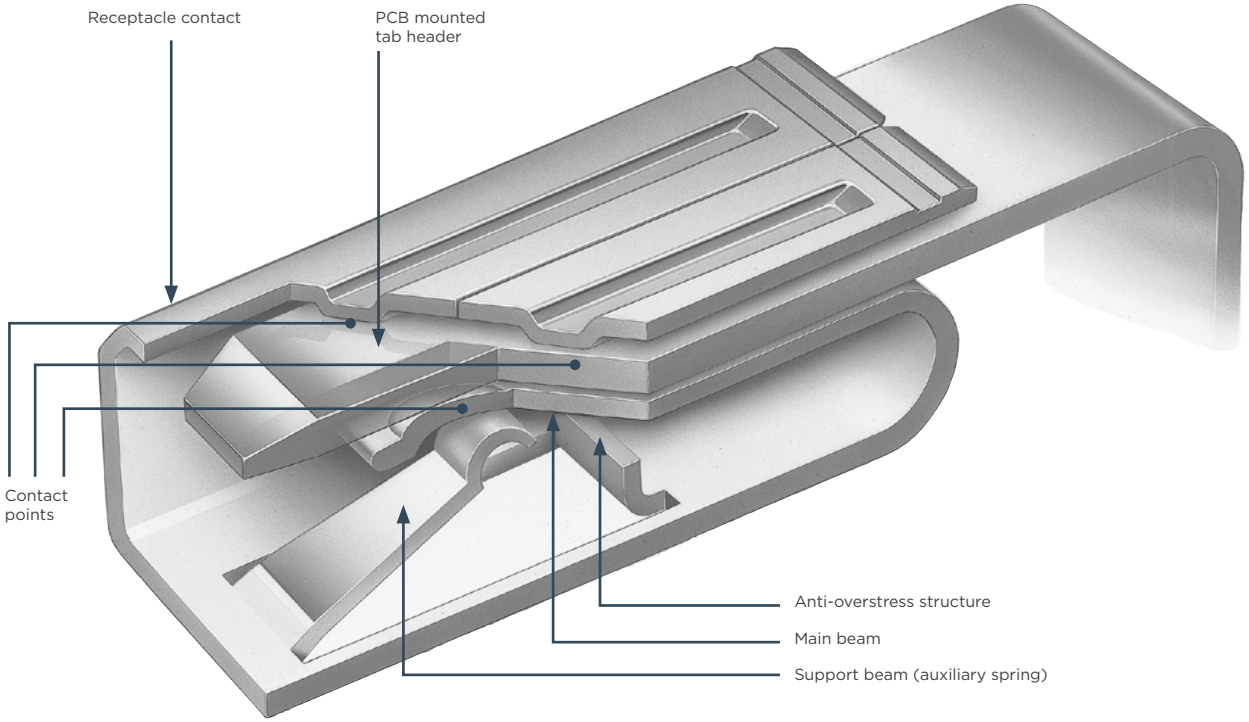
# List of the Dynamic series connectors

| Series Name | | | | Mechanical Performance | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Mounting Methods | | | | | | | | | | | | |
| | | | | | Wire-to-board | | | | | | | | | | | |
| | | | | | DIP | | SMT | | | | | | | | | |
| Series | Family images | Sub-series | Description | Wire-to-Wire | Vertical type | Hori-zontal type | Vertical type | Hori-zontal type | Panel mount | DIN Rai | Tap | Wire | Drawer | Board to board | Number of positions |
| Mini |  | Mini | Double-row Stan-dard | – | – | – | – | O | – | – | – | – | – | – | 12,16,20,24, 28,32,36,40,44 |
| Slim |  | Slim | Small Standard | O | – | – | – | – | – | – | – | – | – | – | 2,3,4,5,6,7,8,9,12,18,24 |
| 1000 |  | 1100S | Standard | – | O | O | – | – | – | – | – | – | – | – | 4,8,10,12,16 |
| | | 1100D | Standard | O | O | O | O | – | O | – | – | – | – | – | 10,18,20,22,24, 26,28,34,40 |
| | | 1200S | High Voltage | O | O | – | – | – | – | – | – | – | – | – | 2 |
| | | 1200D | High Voltage | O | O | O | – | – | O | – | – | – | – | – | 4,6,8,10,12,16,20 |
| | | 1500T | Module Type | – | O | O | – | – | O | O | – | O | – | – | 3,6,9,10, 12,36 |
| | | 1900D | Spring Clamp Type | – | O | O | – | – | – | – | – | – | – | – | 8,12,16,22,30,38 |
| 2000 |  | 2100S | Standard | O | O | O | – | – | O | – | – | – | – | – | 3 |
| | | 2100D | Standard | O | O | O | – | – | O | – | – | – | – | – | 6,8,12,16,20 |
| | | 2100M | Multiposition Drawer | O | – | O | – | – | O | – | – | – | O | – | 50 |
| | | 2600D | Hybrid Power/ Signal | – | O | – | – | – | – | – | – | – | – | – | 48 |
| | | 2800 | Multi-Frame | O | – | – | – | – | O | – | – | – | – | – | 30 |
| | | 2950 | Spring Clamp Type | – | – | O | – | – | – | – | – | – | – | – | 5,6 |
| | | 2970 | On-Site Push- -In Type | – | – | – | – | O | – | – | – | – | – | – | 3,4 |
| 3000 |  | 3100S | Standard & SMT | O | O | O | O | O | O | – | – | – | – | – | 3,4,5,6,8,10 |
| | | 3100D | Standard | O | O | O | – | – | O | – | – | – | – | – | 6,8,10,12,16,20 |
| | | 3100M | Module Type | – | O | O | – | – | – | – | – | – | – | – | 6 |
| | | 3200S | High Voltage | O | O | O | – | – | O | – | – | – | – | – | 2,3,4,5,6 |
| | | 3200M | High Voltage | O | O | O | – | – | O | – | – | – | O | – | 6,10,12,20 |
| | | 3200FMLB | Sequential type | – | – | O | – | – | – | – | – | – | – | – | 4,12 |
| | | 3200T | High Voltage | – | – | O | – | – | – | – | – | – | – | – | 9 |
| | | 3400F | Skyscraper | – | – | O | – | – | – | – | – | – | – | – | 12,20 |
| | | 3500D | Modular Type | O | O | O | – | – | O | – | – | – | – | – | 2,4,6,12,20 |
| | | 3800 | Multi-Frame | O | – | – | – | – | O | – | – | – | – | – | 12 |
| | | 3100/3200 | Dynatap | – | – | – | – | – | – | – | O | – | – | – | 6,18,24/ 4,24 |
| | | 3950 | Spring Clamp Type | – | – | O | – | – | – | – | – | – | – | – | 3,4,6,7,8,11 |
| 4000 |  | 4200S | Standard | O | O | O | – | – | O | – | – | – | – | – | 2,3,4 |
| | | 4200M | Module Type | O | O | – | – | – | O | – | – | – | – | – | 6,8 |
| | | 4800 | Multi-Frame | O | O | – | – | – | O | – | – | – | – | – | 8 |
| | | 4950 | Spring Clamp Type | – | – | O | – | – | – | – | – | – | – | – | 8 |
| 5000 |   | 5200S | Standard | O | O | O | – | – | O | – | – | – | – | – | 2,3,4,6 |
| | | 5200M | High Voltage | O | O | O | – | – | O | – | – | – | – | – | 4,6,8 |
| | | 5300S | Reversed Housing | – | – | – | – | – | O | – | – | – | – | – | 3 |
| | | 5300D | Reversed Housing | – | – | – | – | – | O | – | – | – | – | – | 4 |
| | | 5200 | Dynatap | – | – | – | – | – | – | O | O | – | – | – | 4,12,20 |
| | | 5200Mα | High Current | – | – | O | – | – | – | – | – | – | – | – | 2,4 |
| | | | Dyna-Clamp kit | O | O | O | – | – | O | – | – | – | – | – | 3,4 |
| | | DZ-5200 | Board-to-Board type | – | – | – | – | – | – | – | – | – | – | O | 5,7 |
| | | | | – | – | – | – | – | – | – | – | – | – | O | 3,4 |
| | | 5800 | Multi-Frame | O | – | – | – | – | O | – | – | – | – | – | 4 |
| | | 5900 | Spring Clamp Type | – | – | O | – | – | – | – | – | – | – | – | 4,6 |
| 7000 |  | 7100 | Standard | O | – | O | – | – | O | – | – | – | – | – | 4 |
| | | 7300 | Reversed Housing | O | – | O | – | – | O | – | – | – | – | – | 4 |
| | | | Dyna-Clamp kit | O | – | – | – | – | – | – | – | – | – | – | 4 |
| 8000 |  | 8000 | Standard | – | O | – | O | O | O | O | O | O | O | O | 2 |
| Other products | | | Multiple Enclosure Connector | | | | | | O | | | | | | 15,24,32 |

# List of the Dynamic series

| Series Name | | | Number of Rows | Pitch (mm) | Wire Range (AWG) | Electrical Performance | | | | Safety Standards | Corresponding Pages |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Series | Sub-series | Description | | | | Maximum rated current (A) | Maximum rated voltage (V) | Withstanding Voltage (V) | Durability (Cycles) | UL CSA TÜV | |
| Mini | Mini | Double-row Standard | 2 | 1.8 | 22–26 | 3 | 250 | 650 | 30 | UL : File No. E28476 | 10–13 |
| Slim | Slim | Small Standard | 1,2,3,4 | — | 22–30 | 4.5 | 250 | 1500 | 30 | UL : File No. E28476 | 14–17 |
| 1000 | 1100S | Standard | 1 | 2.0 | 30–22 | 3 | 125 | 1000 | Gold: 100<br>Tin: 30 | UL : File No. E28476<br>TÜV : License No. R50085096 | 22–23 |
| | 1100D | Standard | 2 | 2.0 | 30–22 | 3 | 125 | 1000 | | | 24–26 |
| | 1200S | High Voltage | 1 | 2.5 | 30–18 | 5 | 250 | 1500 | | | 27 |
| | 1200D | High Voltage | 2 | | | | | | | | 28–30 |
| | 1500T | Module Type | 3,4 | 3.5 | | | | | | | 31–33 |
| | 1900D | Spring Clamp Type | 2 | 3.5 | 24–18 | 4 | 150 | 1500 | | UL : File No. E60677 | 34 |
| 2000 | 2100S | Standard | 1 | 2.5 | 28–18 | 5 | 250 | 1500 | 500 | UL : File No. E28476<br>CSA : Report No. LR7189<br>TÜV : License No. R9950679 | 39 |
| | 2100D | Standard | 2 | | | | | | | | 40–41 |
| | 2100M | Multiposition Drawer | 2 | | 20 | 2.6 | 250 | | 500 | UL : File No. E28476<br>CSA : Report No. LR7189<br>TÜV : License No. R9950679 | 42 |
| | 2600D | Hybrid Power/ Signal | 3 | D-2(2.5)<br>D-3(3.81) | D-2(28–18)<br>D-3(28–14) | D-2(3.2)<br>D-3(7.5) | | | | | 43 |
| | 2800 | Multi-Frame | 6 | 3.75 | 28–18 | 5 | | | | | 104–106 |
| | 2950 | Spring Clamp Type | 1 | 5.08 | 18–14 | 10 | 600 | 2200 | Gold: 500 | UL : File No. E60677 | 72 |
| | 2970 | On-Site Push-In Type | 1 | 5.0 | 24–14 | 10(UL)/20(IEC) | 300(UL)/ 400(IEC) | 2210 | Gold: 100; Tin: 25 | UL : File No. E60677<br>VDE : Report No. 40051749 | 78 |
| 3000 | 3100S | Standard & SMT | 1 | 3.81 | 28–14 | 15 | 250 | 1500 | Gold: 500<br>Tin: 100 | UL : File No. E28476<br>CSA : Report No. LR7189<br>TÜV : License No. R50084673 (VDE0627) | 49–52 |
| | 3100D | Standard | 2 | 3.81 | | | | | | | 53–54 |
| | 3100M | Module Type | 2 | 3.81 | | | | | | | 55 |
| | 3200S | High Voltage | 1 | 5.08 | | | 800 | 2600 | | | 56–58 |
| | 3200M | High Voltage | 2 | 5.08 | | | | | | | 59–63 |
| | 3200FMLB | Sequential type | 2 | 5.08 | | | | | | | 64 |
| | 3200T | High Voltage | 3 | 5.08 | | | | | | | 65–66 |
| | 3400F | Skyscraper | 4 | 3.81 | | | 250 | 1500 | | | 67 |
| | 3500D | Modular Type | 2 | 5.08 | | | 600 | 2200 | | | 68–69 |
| | 3800 | Multi-Frame | 4 | 6.5 | | | 600 | 2200 | | | 107 |
| | 3100/3200 | Dynatap | 3,6 | 3.81 | 28–14 | 15 | 250 | 1500 | | | 79–81 |
| | 3950 | Spring Clamp Type | 1,2 | 7.5 | 22–14 | 14.5 | 600 | 2200 | Gold: 500 | UL : File No. E60677 | 73 |
| 4000 | 4200S | Standard | 1 | 6.35 | 16–12 | 24 | 600 | 2500 | 25 | UL : File No. E28476<br>TÜV : License No. R50084673 | 86–87 |
| | 4200M | Module Type | 2 | 6.35 | | 24 | 600 | 2500 | | | 88 |
| | 4800 | Multi-Frame | 4 | 6.35 | | 24 | 600 | 2500 | | UL : File No. E28476 | 107 |
| | 4950 | Spring Clamp Type | 1 | 7.5 | 16–10 | 22 | 600 | 3310 | Gold: 500 | UL : File No. E60677 | 74 |
| 5000 | 5200S | Standard | 1 | 10.16 | 16–10 | 30 | 630 | 3000 | 0.76μ Gold: 50<br>0.38μ Gold: 25 | UL : File No. E28476<br>CSA : Report No. LR7189<br>TÜV : License No. R9650368 | 93–94 |
| | 5200M | High Voltage | 2 | | | | | | | | 95–96 |
| | 5300S | Reversed Housing | 1 | | | | | | | | 98–100 |
| | 5300D | Reversed Housing | 2 | | | | | | | | |
| | 5200 | Dynatap | 3 | | | | | | | | 99 |
| | 5200Mα | High Current | 2 | | 20–8 | 45 | | | Silver: 25 | | 97 |
| | — | Dyna-Clamp kit | 1 | | 16–10 | 30 | | | 0.76μ Gold: 50<br>0.38μ Gold: 25 | — | 100–101 |
| | DZ-5200 | Board-to-Board type | 1 | 5.08 | — | 20 | 250 | 2200 | 15 | UL : File No. E28476<br>CSA : Report No. LR7189<br>TÜV : License No. R50073218 | 102–103 |
| | | | | 10.16 | | 30 | 600 | 4000 | | | |
| | 5800 | Multi-Frame | 2 | 12.0 | 16–10 | 30 | 630 | 3000 | 0.76μ Gold: 50<br>0.38μ Gold: 25 | UL : File No. E28476<br>CSA : Report No. LR7189 | 107 |
| | 5900 | Spring Clamp Type | 1 | 13.1 | 16–8 | 42 | 600(IEC) | 2200 | 0.38μ Gold: 25 | UL : File No. E60677 | 75 |
| 7000 | 7100 | Standard | 2 | 16 | 16–6 | 60 (board-to-wire)<br>65 (wire-to-wire)<br>55 (wire-to-wire cable clamp type) | 630 | 3000 | 0.76μ Gold: 20 | UL : File No. E28476<br>TÜV : License No. R9650368 | 111 |
| | 7300 | Reversed Housing | 2 | 16 | 16–6 | | | | | | 112 |
| | — | Dyna-Clamp kit | 2 | 16 | — | | | | | | 113 |
| 8000 | 8000 | Standard | 1 | 24.4 | 3 | 100A (wire-to-wire)<br>90A (wire-to-board) | 1000 | 3000 | 10 | — | 114–117 |
| Other products | — | Multiple Enclosure Connector | 4,8 | See details in series page | | See details in series page | | | | See details in series page | 118–120 |

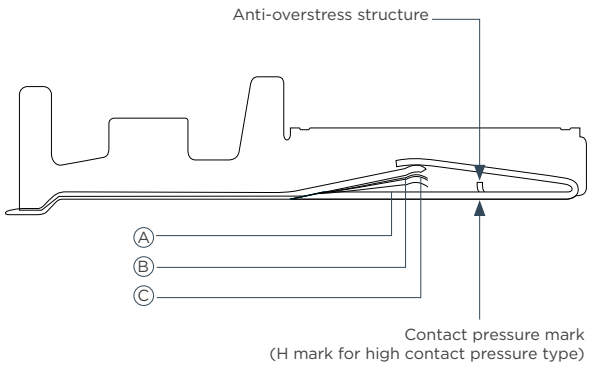
# Contact Features (Example of the D-3000 Series connectors)




(Illustration of the D-3 contact)

## Contact Pressure Adjustment Method

- Gold and Tin contacts are available. Adjustable gaps for the auxiliary spring (at positions of A-C) to get the well-suited contact pressure. For gold-plated product, both high pressure contact and standard pressure contact are available in accordance with the intended use
- Anti-overstress structure helps prevent damage to the main beam which might be caused by insertion of external objects or twisting (Receptacle contact type of D-2 S, M/D-3 S, M, L, 2L, 3L/D-5 S, M)



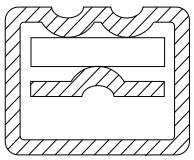

(Applicable to the D-3 terminal)

| Plating | Type | Contact Pressure | Position | Contact Pressure Mark | Applicable Positions | Specifications | Application | Durability approximates cycles |
|---|---|---|---|---|---|---|---|---|
| Gold | Standard Contact Pressure | Around 1.47N | Ⓐ | — | 1-100 | Standard | Used for signal/power multi- position and High durability cycles circuits | 500 |
| | High Contact Pressure | Around 2.45N | Ⓑ | H | 1-20 | Vibration / High Current | Used for signal/Power supply/ Motor application with high- vibration feature | 500 |
| Tin | High Contact Pressure | Around 3.92N | Ⓒ | H | 1-10 | High Current | Used for signal/Power supply circuit with few durability cycles | 100 |

# Contact Features (Example of the D-3000 Series connector)

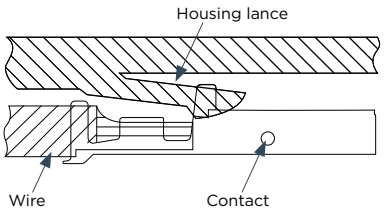
### Tab/Receptacle Contact

Male side is tab, while female side is receptacle contact so as to avoid twisting. (Refer to figure below) Highly reliable 3-point contacts are used.



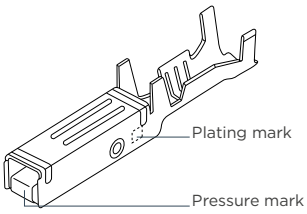
### Fixing of the contact and housing

The housing lance is used to secure the contact in place. The lance ensures the contact stays secure in the housing and helps prevent damage during contact mating. In addition to these protective features, the housing lance produces an audible “click” helping ensure the contact is Securely locked in the housing. The contact can still be easily removed with extraction tool.

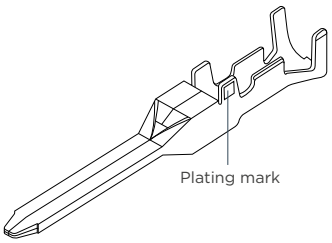



### Confirmation Marks

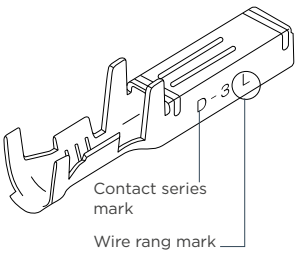
- Contact Pressure marks.....”H” mark on the bottom of the contact for high pressure contact product (standard pressure contact for those without the marks)
  (Only for D-3 contact)
- Plating marks.....To show clearly types and thickness of the plating. Following numbers will be marked on the side surface of the contact. This number is consistent with the additional number of contact’s part model number.
  -2.....Gold plating of 0.38μm in thickness
  -3.....Gold plating of 0.76μm in thickness
  -5.....Tin plating
- Marking both contact series (D-1/D-2/D-3/ D-4/D-5) and wire range (SS,S,M,L) on side surface of contact aim to avoid



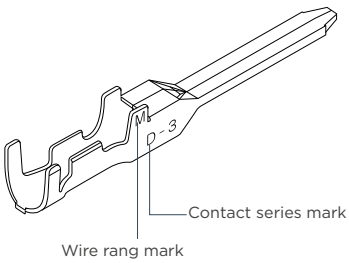

Receptacle Contact




Tab contact



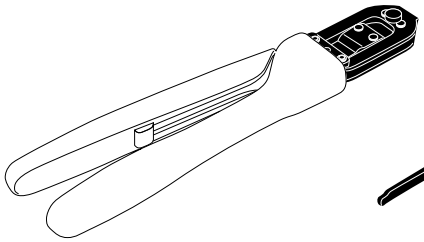

Receptacle Contact



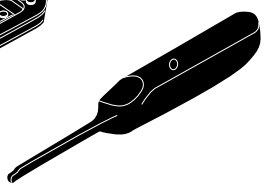

Receptacle Contact

Wire range marks

| | | |
|---|---|---|
| D-1 | | |
| | S | .....AWG#30–28 |
| | M | .....AWG#28–22 |
| | L | .....AWG#28–22 |
| | 2L | .....AWG#22–18 |
| D-2 | | |
| | S | .....AWG#28–24 |
| | M | .....AWG#22–18 |
| D-3 | | |
| | S | .....AWG#28–24 |
| | M | .....AWG#24–20 |
| | L | .....AWG#20–16 |
| | 2L | .....AWG#16–14 |
| | 3L | .....AWG#16–14 |
| D-4 | | |
| | M | .....AWG#16–14 |
| | L | .....AWG#14–12 |
| D-5/D5α | | |
| | SS | .....AWG#20–16 |
| | S | .....AWG#16–14 |
| | M | .....AWG#12–10 |
| | L | .....AWG#8 |

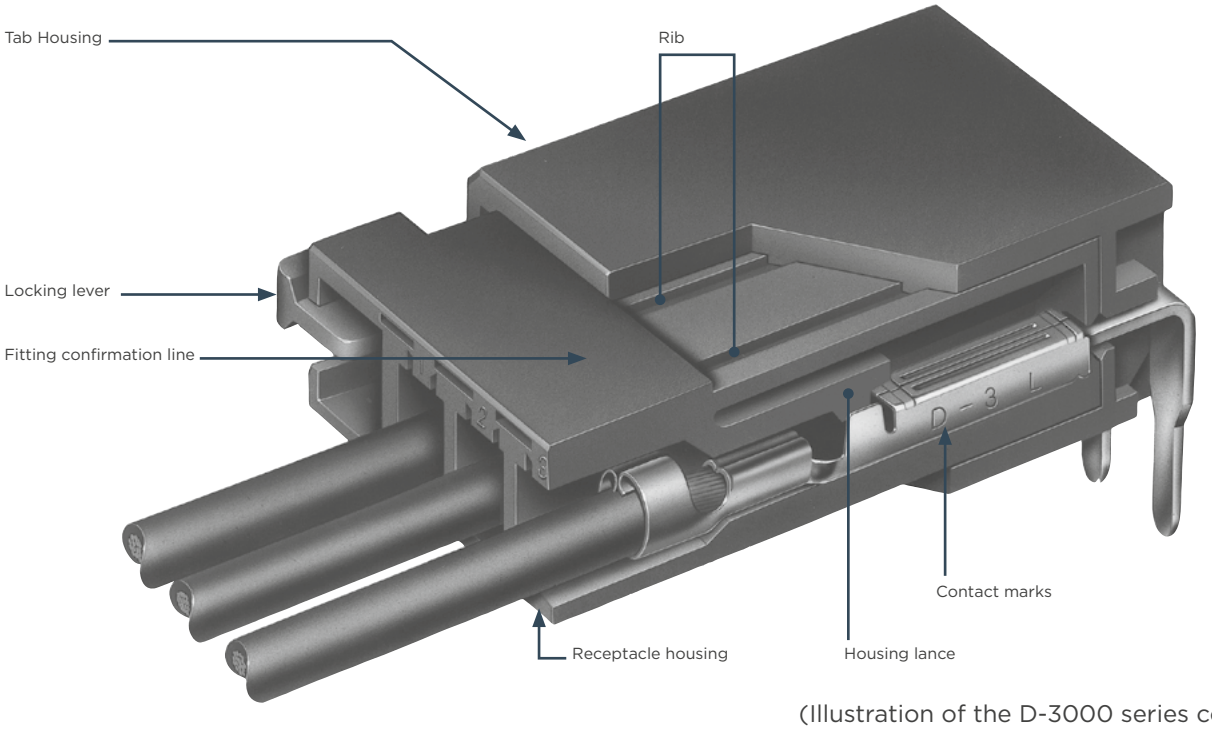


Receptacle Contact



Receptacle Contact

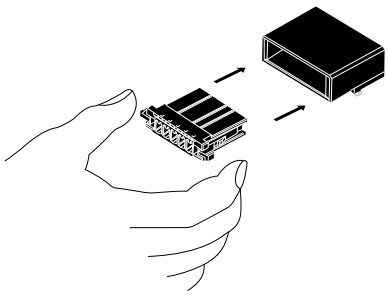
## Housing Features (Example of the D-3000 Series connector)



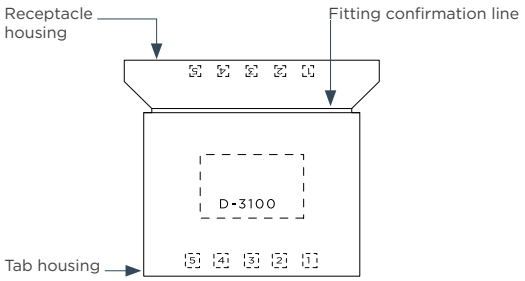

(Illustration of the D-3000 series connector)

### Easier to insert and extract the connector

- When you insert or extract the connector, a clear "click" sound will be heard. A fitting confirmation line is provided to confirm the operation
- Pinch 2 locking levers on both sides of the housing to easily extract the receptacle side D-3000/D-3200/ D-4000/D-5200 series connector)

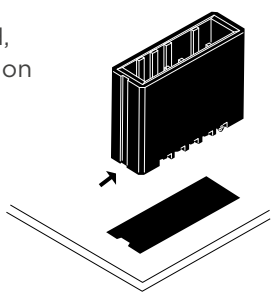


- For safety consideration, well rounded corners will be used to help prevent hand Injuries when inserting or extracting the connector



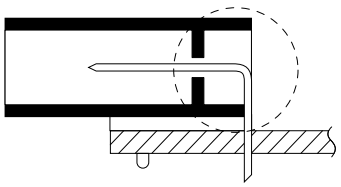

### Vertical – type header

- To avoid mis- installation or mis- alignment of the header on board, pay attention to direction indicator (concave) of vertical-type header (only available for D-3000 Series)



### Housing to protect Tin-plated contacts

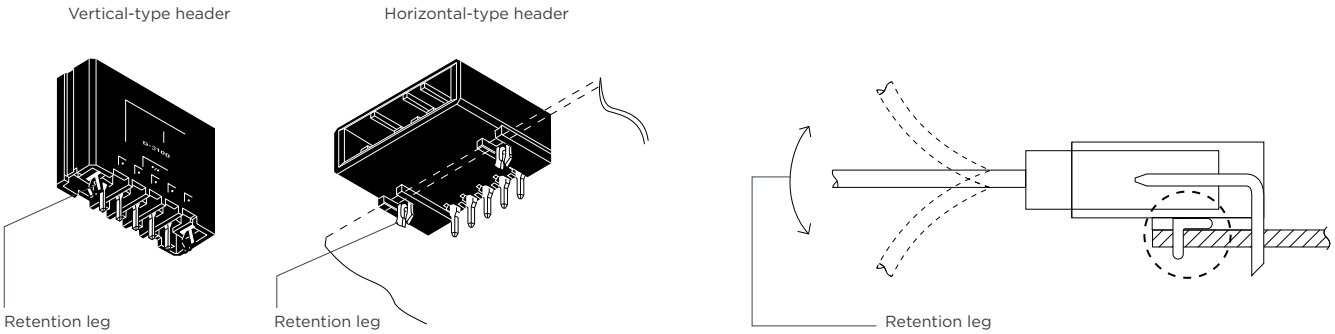
- For protecting the soldering Tin-plated contacts, housing of horizontal type of header will be fully applied to cover contacts.



# Housing Features (Example of the D-3000 Series connector)

### Retention legs for board mounting

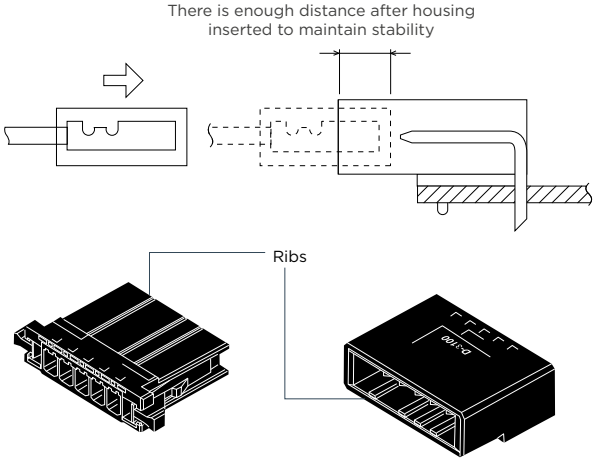
- For robotic automatic implementation, the retention legs will be provided for both the vertical-type and the horizontal-type headers.
- Especially for the horizontal-type header, it is possible to mount to the bottom of the housing and it will not take up as wide a space as the conventional system. Retention legs are close to the insertion part of the receptacle housing so as to resist tilting caused by the cable.




Note: The fixing pins are of the same thickness as the 1.6mm thickness circuit board. When they are used for a 2.4mm thickness circuit board, the strength will decrease somewhat.

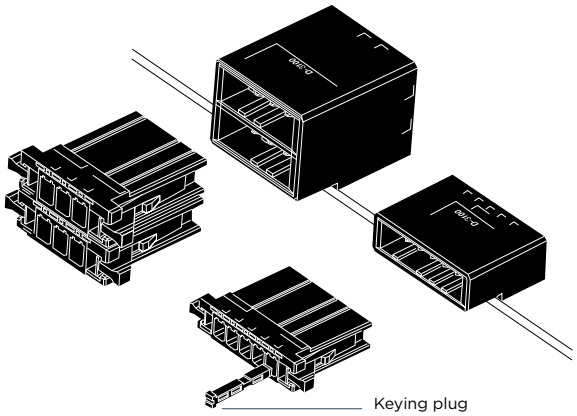
### Twisting Prevention Structure

- The ribs are used in both receptacle housing and tab housing. This safety design can be used to significantly reduce backlashes between housings after the receptacle housing has been completely inserted into tab housing.



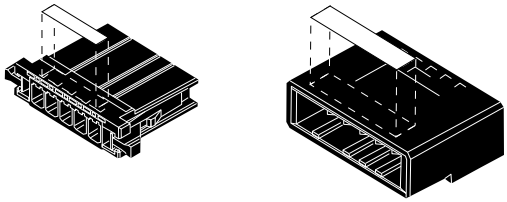

### Anti-mis-mating structure

- Part of the products (D-1200D/ D-2100S/ D-2100D/ D-3100S/ D-3100M/ D-3200S/ D-3200M/D-3200T/ D-4000/ D-5200S/ D-5200M) is provided with key to prevent incorrect insertion. This plug, also makes it easier to prevent incorrect insertion of other items. (refer to Page 121, which shows the information of keying plug, for D-2000 series only; and Page 121, for D-3000 series only)



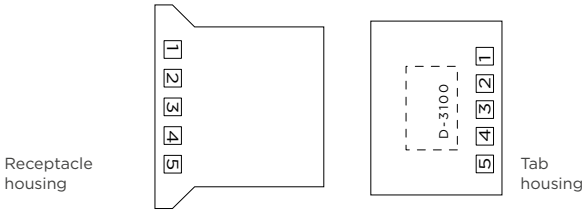

### Label Mark

- A flat side portion is provided in the housing for custom labels.



### Easy-to-read circuit number

- To facilitate cable assembly, tab and receptacle housings will be marked with circuit numbers.



# Guideline for plating selection

(These guidelines apply to the Dynamic D-3000 series connectors series only. Please note that they may not be suitable for other products.)

Whether to use gold or tin plating depends on the voltage, current, environment (vibration, temperature, gas, etc.), number of contact positions, and other variables.

Gold plating is recommended for general industrial machinery, but in reality cost considerations are also a factor. To help in this selection, these guidelines have been put together for Dynamic series as a reference in the selection process.

## (1) Selection based on voltage and current

| | Gold plated | Undetermined zone | Tin | No plating (Reference) |
|---|---|---|---|---|
| Voltage | Below 3 V | 3 to 30 V | 30 ~ 100 V | Over 100 V |
| Current | Below 1 A | 1 to 10 A | Over 10 A | Over 0.1 A |

(Table 1)

Table 1 shows us that gold should always be used for applications under 3 volts and 1 ampere. When the voltage is over 30 and amperage is over 10, tin plating can be used. The most difficult area to make a selection is in the undetermined zone. In this zone either gold or tin plating can be used, and environmental parameters are the key variation to consider due to extensive impact on the application.

In a clean environment tin plating is acceptable. However, use gold plating if the environment is harsh, such as high heat or humidity, the presence of gas is possible, vibration is extreme, mating and demating are frequent, or other factors.

## (2) Selection based on number of contact positions (selection based on contact pressure)

Selection based on the number of contact positions is often forgotten. The higher the contact pressure the more possible it is to use tin plating or no plating, regardless of the voltage or current mentioned in section 1. However, if pressure is too high, mating and demating becomes impossible so the connector function is lost. To get around this, we can drive the voltage and current down into a workable zone, but then we run into the problem of oxidation. To prevent oxidation, we use tin (approximately 2.94 N optimum contact pressure) or gold (approximately 1.18 N) plating. Even though, the contact pressure increases proportionally as we increase the number of contact positions, it makes mating and demating difficult. Generally speaking, given a 39.2 N limit for mating/ demating by hand, it becomes difficult without using leverage, such as a lever or jack screw when the limit exceeds.

The D-3000 series connector has a maximum of 20 contact positions. The contact pressure per pin with tin plating is 3.92 N, and with gold plating is 2.45 N and 1.47 N (high pressure types and standard types are available for some applications).

For instance, given 3.92 N for tin plating, the insertion and extraction force of 20-position connector will be 58.8N and 49.0N, which is difficult because it exceeds the range for barehanded work. Therefore, gold plating are selected when position is increased regardless of the voltage and current conditions mentioned in section 1.
Table 2 shows the applicable maximum number of contact positions as a reference.

| Contact Pressure | | Applicable Maximum Number of Contact Positions |
|---|---|---|
| (1) Gold Standard contact pressure parts: | 1.47N | 20 |
| (2) Gold High contact pressure parts: | 2.45N | 20 |
| (3) Tin High contact pressure parts: | 3.92N | 12 |

(Table – 2) Note: Insertion force and extraction force are not the same as contact pressure.

## (3) Environment (vibration, humidity, gas, etc.)

Although environmental parameters about voltage and current were discussed in section 1, it is summarized again here. Use gold plating in a harsh environment, particularly for high vibration or heat, the presence of gas or other harsh conditions. Gold is a noble metal and does not react easily with other materials which means good resistance to oxidation. This is a very important property for contacts.

Also, if vibration is an issue, fretting corrosion (micro- abrasion) is a risk. In cases like this, gold plating is always the recommended choice.

# Guideline for plating selection

(These guidelines apply to the D-3000 series only.
Please note that they may not be suitable for other products.)

## (4) Others considerations

### Contact between dissimilar metals

Whether to use gold or tin plating depends on the voltage, current, environment (vibration, temperature, gas, etc.), number of contact positions, and other variables.

### Being consistent within an application

We recommend that, as much as possible, the same type of plating be used within one application. This is to help prevent connections being made between dissimilar metals, gold and tin as mentioned on the left, during assembly and maintenance.
And for the same reason, we recommend using the same plating in factories or workplaces where assembly or harness production is done.

The above information has been summarized in “Plating selection at a glance” for your convenience.

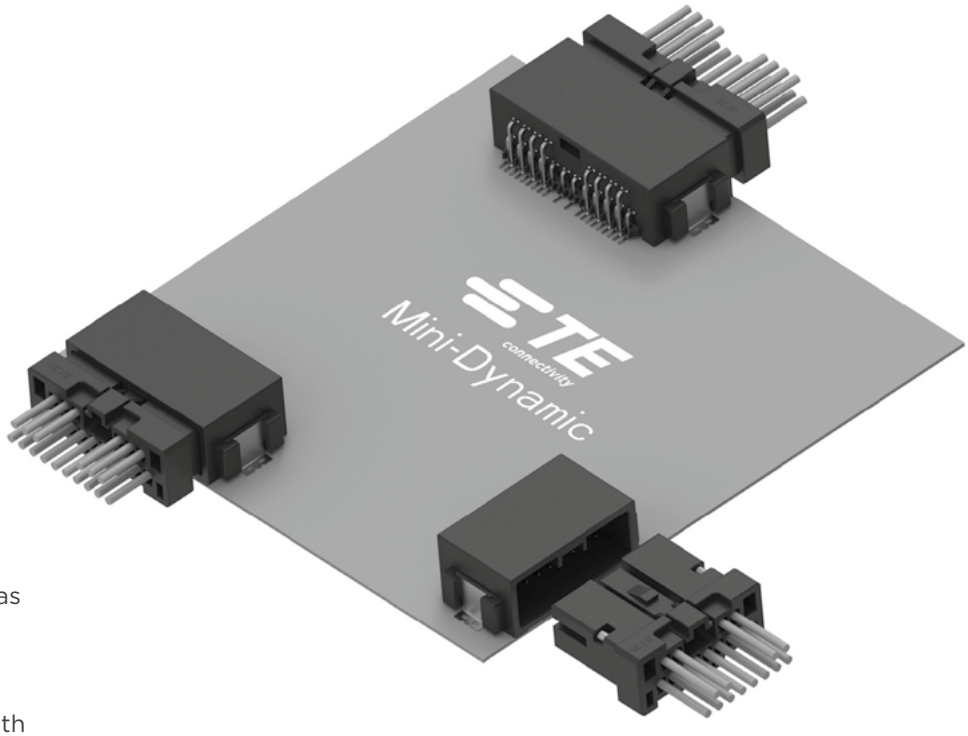
★★★ Best
★★ Good
★ Usable
— Unacceptable

### Platings selection at a glance

| Voltage/Current | Application | Tin plated | Gold plated | | | |
|---|---|---|---|---|---|---|
| | | | 0.38μ | | 0.76μ | |
| | | | Standard pressure | High pressure | Standard pressure | High pressure |
| Below 3V Below 1A | Standard specifications | – | ★★ | ★★ | ★★★ | ★★★ |
| | Vibration | – | ★ | ★★ | ★ | ★★★ |
| | Harsh environment | – | ★ | ★ | ★★ | ★★★ |
| | Extensive mating/ unmating | – | ★★ | ★ | ★★★ | ★★ |
| | Many contact positions | – | ★★★ | ★★ | ★★★ | ★★ |
| 3 to 30V 1 to 10A | Standard specifications | – | ★★ | ★★ | ★★★ | ★★★ |
| | Vibration | – | ★ | ★★ | ★ | ★★★ |
| | Harsh environment | – | ★★ | ★★ | ★★★ | ★★★ |
| | Extensive mating/ unmating | – | ★★ | ★ | ★★★ | ★★ |
| | Many contact positions | – | ★★★ | ★★ | ★★★ | ★★ |
| Over 30V Over 10A | Standard specifications | | ★★★ | ★★★ | ★★★ | ★★★ |
| | Vibration | – | ★★ | ★★★ | ★★ | ★★★ |
| | Harsh environment | – | ★★ | ★★ | ★★★ | ★★★ |
| | Extensive mating/ unmating | – | ★★★ | ★★ | ★★★ | ★★ |
| | Many contact positions | – | ★★★ | ★★ | ★★★ | ★★ |

The above table is based on industrial equipment with sufficient margin reserved. There are various combinations depending on the application, so it is not necessarily as shown in the above table, which is for reference only.

# Mini Dynamic Series connector




## Series Introduction

The Dynamic Mini Sub-series, as the name suggests, are the smallest connectors in the Dynamic family, with superior low profile design, both in height and pitch. It is highly reliable for use in applications where board space is at a premium.

The Dynamic Mini Sub-series is superior in design with the same performance features found in all Dynamic products:

- Crimped terminals on the wire end
- Audible-tactile locking mechanism for male and female mating
- Double locking design for the wire-end terminals in the wire-end plastic housing
- Protective latch concept to helps ensure the reliability of the connection

It is also worth mentioning that halogen-free materials are used for the board-end plastic housing.

The higher reliability and smaller size make the Mini Sub-series not only usable in the industrial environment, but can also easily meet the needs of other applications in automotive and robotics, which require higher vibration resistance.

## Product Highlights

**1. Small size**
The Dynamic Mini Series has a lower profile than the D-1100 D Series, especially in the height, which provides more valuable space on the board.

**2. Secondary locking design**
Dynamic Mini introduces the secondary locking design, in addition to the conventional terminals for cable wrapping and crimping. There is also a flush-mounted latch on the plastic housing which provides additional locking of the terminal into the plastic housing increasing reliability. This further helps reduce the risk of the cable loosening.

**3. Sunken unlocking structure**
In addition to inheriting the superior audible- tactile locking design of the Dynamic Series, the Mini sub-series has a unique protective latch concept. Compared to the D-1200 series, which raises the plastic housing around the unlocking structure to protect the latch and prevent accidental unlocking. The Dynamic Mini achieves the same function through a sunken design that is more user-friendly.

**4. Tin-plated terminals**
The choice of tin plating, together with the secondary locking and sunken unlocking structure, makes the Dynamic Mini products cost effective.

**5. Board- end surface- mount**
(SMT) design, suitable for reflow soldering high temperature material is selected for the board-end plastic housing, suitable for reflow soldering. The soldering plate of the terminal is surface-mounted (SMT), which facilitates automatic pick and place.

NOTE: All products are RoHS compliant On selection.

# Mini Dynamic Series Performance and Specifications

## Performance

| Item \ Series | Mini Dynamic |
|---|---|
| Pitch | 1.8 mm |
| Rated voltage (max) | 250V AC/125V DC |
| Rated current (max) | 3A |
| Contact resistance | 30mΩ max |
| Withstanding voltage | 650V |
| Operating temperature | -40°C to 125°C |

## Positions / Wire size / Rated current

Mini Dynamic

| Positions | Cable size (AWG) | | |
|---|---|---|---|
| | 22 | 24 | 26 |
| 12–20 | 3 | 2 | 1 |
| 24–44 | 3 | 2 | 1 |

## Product Specification and Instruction Sheet

| | |
|---|---|
| Product Specification | 108–137443 (reference for industrial field)<br>108–137526 (reference for automotive field) |
| Application Specification | 114-137526 (for receptacle contact)<br>114-137527 (for receptacle connector assembly) |

## Materials and Plating

| Category | Material |
|---|---|
| Contact | Copper alloy |
| Plating in mating area | Tin over nickel underplated |
| Plastic housing | UL94-V-0 |
| Plastic housing of header | High temperature nylon, halogen free |
| Plastic housing of receptacle (wire end) | PBT (with halogen free version) |
| Retention pin | Copper alloy |
| | X and Y mechanical codings |

# Mini Series Contact
## Crimp Contacts





| Wire Range | | | | Receptacle Contact | | Application Toolings | | |
|---|---|---|---|---|---|---|---|---|
| AWG | $mm^2$ | Outer diameter of insulation mm | Wire range mark | Plating | Strip Form | Hand Tool | Ocean Applicator | Extraction Tool |
| 26 | 0.13-0.17 | 0.85-1.10 | S | Tin | 2834464-5 | 2402611-1 | 2151332-2 | 2834501-1* |
| 24-22 | 0.22-0.35 | 0.95-1.30 | M | Tin | 2834464-6 | 2401910-1 | 2151524-2 | |

## Mini Dynamic Double-row Standard Types – 1.8mm pin pitch

### Type Chart

Receptacle Housing



Board-Mounting Header



| Pos. | Color | Key | Receptacle | | Header (Halogen free) |
|---|---|---|---|---|---|
| | | | Standard | Halogen free* | Tin plating |
| 12 | Black | X | 1-2834461-2 | 1-2834627-2 | 1-2834465-2 |
| | Black | Y | 1-2834497-2 | 1-2834628-2 | 1-2834499-2 |
| 16 | Black | X | 1-2834461-6 | 1-2834627-6 | 1-2834465-6 |
| | Black | Y | 1-2834497-6 | 1-2834628-6 | 1-2834499-6 |
| 20 | Black | X | 2-2834461-0 | 2-2834627-0 | 2-2834465-0 |
| | Black | Y | 2-2834497-0 | 2-2834628-0 | 2-2834499-0 |
| 24 | Black | X | 2-2834461-4 | 2-2834627-4 | 2-2834465-4 |
| | Black | Y | 2-2834497-4 | 2-2834628-4 | 2-2834499-4 |
| 28 | Black | X | 2-2834461-8 | 2-2834627-8 | 2-2834465-8 |
| | Black | Y | 2-2834497-8 | 2-2834628-8 | 2-2834499-8 |
| 32 | Black | X | 3-2834461-2 | 3-2834627-2 | 3-2834465-2 |
| | Black | Y | 3-2834497-2 | 3-2834628-2 | 3-2834499-2 |
| 36 | Black | X | 3-2834461-6 | 3-2834627-6 | 3-2834465-6 |
| | Black | Y | 3-2834497-6 | 3-2834628-6 | 3-2834499-6 |
| 40 | Black | X | 4-2834461-0 | 4-2834627-0 | 4-2834465-0 |
| | Black | Y | 4-2834497-0 | 4-2834628-0 | 4-2834499-0 |
| 44 | Black | X | 4-2834461-4 | 4-2834627-4 | 4-2834465-4 |
| | Black | Y | 4-2834497-4 | 4-2834628-4 | 4-2834499-4 |

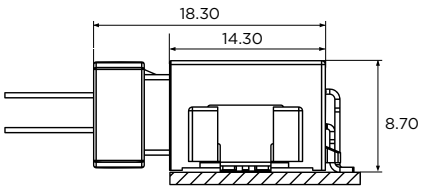
NOTE: All products are RoHS compliant on selection.
* Preliminary to release

# Mini Dynamic Double-row Standard Types – 1.8mm pin pitch

## Relative Product Information

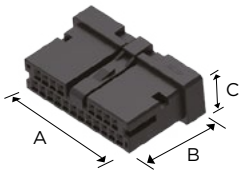
Applicable contact...P.12
Performance & specifications...P.11

## Mated Dimensions




## External Dimensions

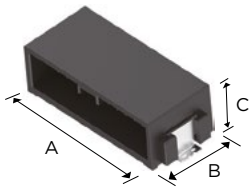
- Receptacle Housing




| Pos. | Color | Key | Part Number | | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | Standard | Halogen free* | A | B | C |
| 12 | Black | X | 1-2834461-2 | 1-2834627-2 | 19.3 | 15.7 | 8.35 |
| | Black | Y | 1-2834497-2 | 1-2834628-2 | | | |
| 16 | Black | X | 1-2834461-6 | 1-2834627-6 | 22.9 | | |
| | Black | Y | 1-2834497-6 | 1-2834628-6 | | | |
| 20 | Black | X | 2-2834461-0 | 2-2834627-0 | 26.5 | | |
| | Black | Y | 2-2834497-0 | 2-2834628-0 | | | |
| 24 | Black | X | 2-2834461-4 | 2-2834627-4 | 30.1 | | |
| | Black | Y | 2-2834497-4 | 2-2834628-4 | | | |
| 28 | Black | X | 2-2834461-8 | 2-2834627-8 | 33.7 | | |
| | Black | Y | 2-2834497-8 | 2-2834628-8 | | | |
| 32 | Black | X | 3-2834461-2 | 3-2834627-2 | 37.3 | | |
| | Black | Y | 3-2834497-2 | 3-2834628-2 | | | |
| 36 | Black | X | 3-2834461-6 | 3-2834627-6 | 40.9 | | |
| | Black | Y | 3-2834497-6 | 3-2834628-6 | | | |
| 40 | Black | X | 4-2834461-0 | 4-2834627-0 | 44.5 | | |
| | Black | Y | 4-2834497-0 | 4-2834628-0 | | | |
| 44 | Black | X | 4-2834461-4 | 4-2834627-4 | 48.1 | | |
| | Black | Y | 4-2834497-4 | 4-2834628-4 | | | |

- Board-Mounting Header

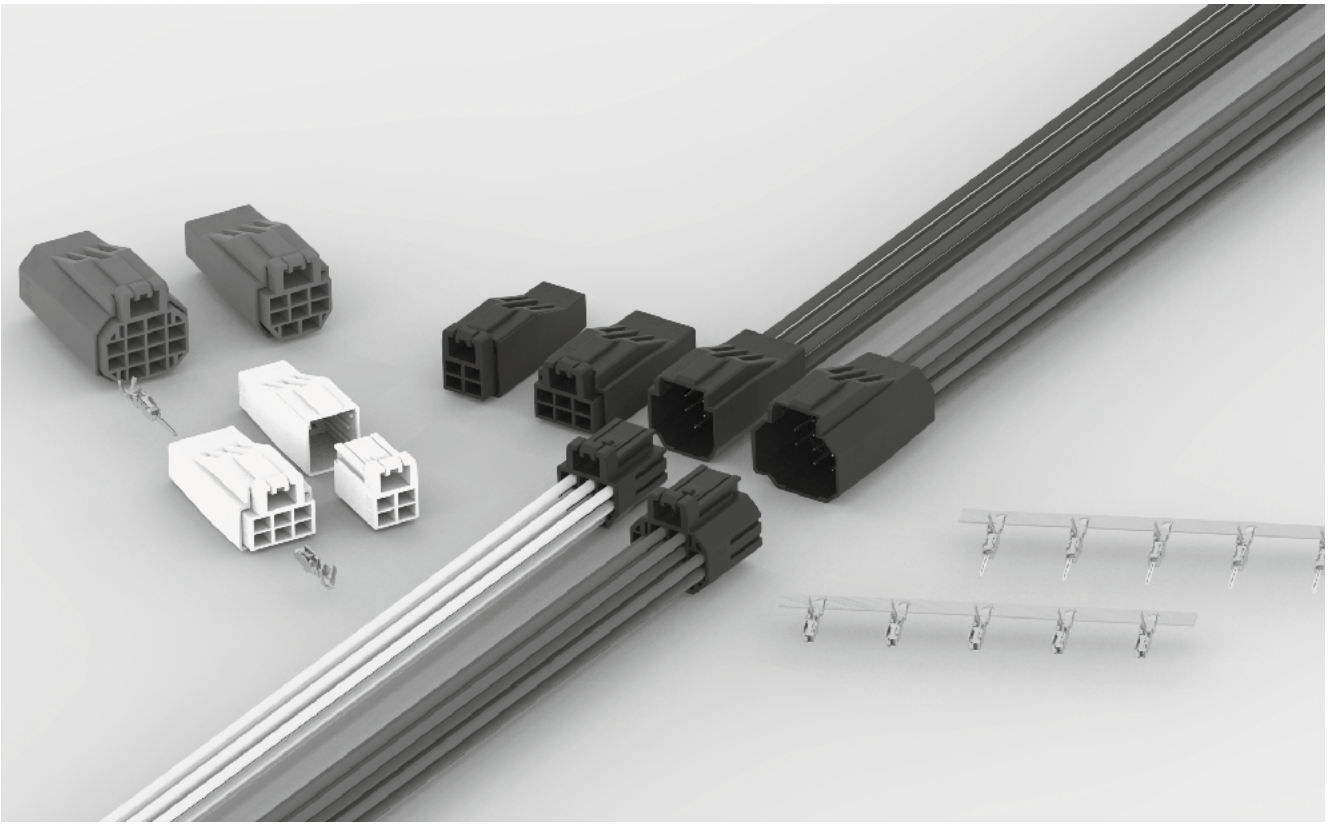
Horizontal type




| Pos. | Color | Key | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | Tin plating | A | B | C |
| 12 | Black | X | 1-2834465-2 | 19.5 | 12.3 | 8.7 |
| | Black | Y | 1-2834499-2 | | | |
| 16 | Black | X | 1-2834465-6 | 23.1 | | |
| | Black | Y | 1-2834499-6 | | | |
| 20 | Black | X | 2-2834465-0 | 26.7 | | |
| | Black | Y | 2-2834499-0 | | | |
| 24 | Black | X | 2-2834465-4 | 30.3 | | |
| | Black | Y | 2-2834499-4 | | | |
| 28 | Black | X | 2-2834465-8 | 33.9 | | |
| | Black | Y | 2-2834499-8 | | | |
| 32 | Black | X | 3-2834465-2 | 37.5 | | |
| | Black | Y | 3-2834499-2 | | | |
| 36 | Black | X | 3-2834465-6 | 41.1 | | |
| | Black | Y | 3-2834499-6 | | | |
| 40 | Black | X | 4-2834465-0 | 44.7 | | |
| | Black | Y | 4-2834499-0 | | | |
| 44 | Black | X | 4-2834465-4 | 48.3 | | |
| | Black | Y | 4-2834499-4 | | | |

NOTE: All products are RoHS compliant on selection.
* Preliminary to release

# Dynamic Slim Series



## Series Introduction

The Dynamic Slim Series Connector is a wire-to-wire connection solution for smaller devices in the industrial field. An excellent blend of high reliability and smaller size is achieved through a balanced contact arrangement, supporting the trend toward miniaturization of devices.

## Product Highlights

**1. Small size**
The Dynamic Slim Series connector has a size advantage over the D-1100 and D-1200 series based on a near-circular hole layout. This is especially important when the product needs to be used in restricted spaces, such as the internal wiring of robotic arms. The more reasonable hole layout helps improve the efficiency of space usage.

**2. Vibration-resistant terminal housing structure**
Box receptacles and terminals are highly vibration-resistant. The slots in the housing prevent improper mating and provide high reliability.

**3. Effective mating length**
Although small, the reliability required for industrial devices is achieved by terminals that provides for effective mating length.

**4. Latching**
When mating, a clear locking sound and sensation informs the operator, making it possible to complete work virtually without defects such as improper mating (half mating) even in an operating environment where visual inspection is not possible.

# Dynamic Slim Series Performance and Specifications

## Performance

| | |
|---|---|
| Rated voltage | AC/DC 250V max. |
| Withstanding voltage | AC 1,500 V / 1 minutes |
| Wire Range | AWG # 22 ~ # 30 |
| Operating temperature | -55°C to +125°C |
| Durability | up to 30 cycles |

## Positions / Wire size / Rated current

Dynamic Slim Series

| Positions | Cable size (AWG) | | | | |
|---|---|---|---|---|---|
| | AWG 22 | AWG 24 | AWG 26 | AWG 28 | AWG 30 |
| 2-4 | 4.5 | 3.9 | 3.2 | 2.2 | 1.6 |
| 5-6 | 4.2 | 3.4 | 2.9 | 2 | 1.3 |
| 7-8 | 3.8 | 3.1 | 2.6 | 1.8 | 1.2 |
| 9-12 | 3.5 | 2.8 | 2.3 | 1.6 | 1.1 |

Temperature rise: 30°C max

| Positions | Cable size (AWG) | | | | |
|---|---|---|---|---|---|
| | AWG 22 | AWG 24 | AWG 26 | AWG 28 | AWG 30 |
| 2-4 | 8.6 | 7.2 | 6 | 4.1 | 3.1 |
| 5-6 | 8 | 6.4 | 5.5 | 3.7 | 2.9 |
| 7-8 | 7.3 | 5.8 | 5 | 3.2 | 2.5 |
| 9-12 | 6.5 | 5.2 | 4.4 | 2.9 | 2.3 |

Ambient temperature: 25°C temperature rise: 100°C

## Product Specification and Instruction Sheet

| | |
|---|---|
| Product Specification | 108-140257 |
| Application Specifications | 114-5377 |
| Instruction Sheet | 408-78197 |

## Materials and Plating

| Category | Material | Finish |
|---|---|---|
| Receptacle Contact<br>Tab Contact | Copper alloy | Gold plating (0.2µm) |
| Housing | UL94V-0, thermoplastic PBT with glass fiber | |

## Dynamic Slim Contact



Receptacle Contact
(for Receptacle housing)

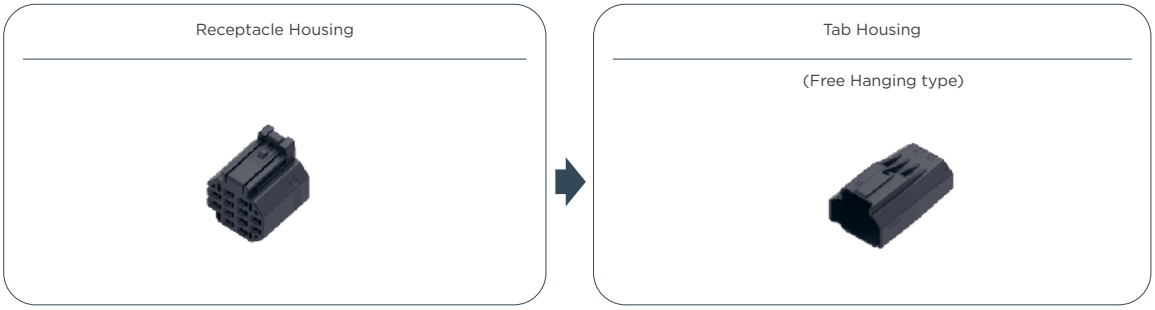


Tab contact
(for Tab housing)

| Wire Range | | Outer Diameter of Insulation mm | Wire Range Mark | Contact | | | | | Applicable Tools | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG | mm² | | | Plating | Receptacle Contac | | Tab Contact | | Hand Tool | Micro Applicator | Extraction Tool |
| | | | | | Strip Form | Loose Piece | Strip Form | Loose Piece | | | |
| 30 | 0.05 | 0.6 ~ 1.2 | S | Gold plating | 2367817-1 | 2367818-1 | 2367819-1 | 2367820-1 | 2381707-1 (2119144-1 with 2381710-1) | 2151110-1 | 2323787-1 |
| 28 | 0.08 | | | | | | | | | | |
| 28 | 0.08 | 1.08 ~ 1.6 | M | | 2367817-2 | 2367818-2 | 2367819-2 | 2367820-2 | 2371748-1 (2119141-1 with 2381710-1) | 2151082-1 | |
| 26 | 0.12 | | | | | | | | | | |
| 24 | 0.20 | | | | | | | | | | |
| 22 | 0.30 | | | | | | | | | | |

# Slim Small Standard Types

## Type Chart

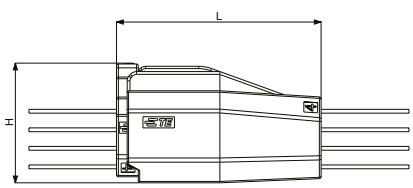



| Pos | Key | Receptacle Housing | | | Tab Housing – Free Hanging type | | |
|---|---|---|---|---|---|---|---|
| | | Color | | | Color | | |
| | | Black | Natural | Blue | Black | Natural | Blue |
| 2 | X | 1-2375948-2 | 5-2375948-2 | 7-2375948-2 | 1-2375951-2 | 5-2375951-2 | 7-2375951-2 |
| | Y | 2-2375948-2 | 6-2375948-2 | 8-2375948-2 | 2-2375951-2 | 6-2375951-2 | 8-2375951-2 |
| 3 | X | 1-2375948-3 | 5-2375948-3 | 7-2375948-3 | 1-2375951-3 | 5-2375951-3 | 7-2375951-3v |
| | Y | 2-2375948-3 | 6-2375948-3 | 8-2375948-3 | 2-2375951-3 | 6-2375951-3 | 8-2375951-3 |
| 4 | X | 1-2366515-4 | 5-2366515-4 | 7-2366515-4 | 1-2366600-4 | 5-2366600-4 | 7-2366600-4 |
| | Y | 2-2366515-4 | 6-2366515-4 | 8-2366515-4 | 2-2366600-4 | 6-2366600-4 | 8-2366600-4 |
| 5 | X | 1-2375948-5 | 5-2375948-5 | 7-2375948-5 | 1-2375951-5 | 5-2375951-5 | 7-2375951-5 |
| | Y | 2-2375948-5 | 6-2375948-5 | 8-2375948-5 | 2-2375951-5 | 6-2375951-5 | 8-2375951-5 |
| 6 | X | 1-2366515-6 | 5-2366515-6 | 7-2366515-6 | 1-2366600-6 | 5-2366600-6 | 7-2366600-6 |
| | Y | 2-2366515-6 | 6-2366515-6 | 8-2366515-6 | 2-2366600-6 | 6-2366600-6 | 8-2366600-6 |
| 7 | X | 1-2375948-7 | 5-2375948-7 | 7-2375948-7 | 1-2375951-7 | 5-2375951-7 | 7-2375951-7 |
| | Y | 2-2375948-7 | 6-2375948-7 | 8-2375948-7 | 2-2375951-7 | 6-2375951-7 | 8-2375951-7 |
| 8 | X | 1-2366515-8 | 5-2366515-8 | 7-2366515-8 | 1-2366600-8 | 5-2366600-8 | 7-2366600-8 |
| | Y | 2-2366515-8 | 6-2366515-8 | 8-2366515-8 | 2-2366600-8 | 6-2366600-8 | 8-2366600-8 |
| 9 | X | 1-2375948-9 | 5-2375948-9 | 7-2375948-9 | 1-2375951-9 | 5-2375951-9 | 7-2375951-9 |
| | Y | 2-2375948-9 | 6-2375948-9 | 8-2375948-9 | 2-2375951-9 | 6-2375951-9 | 8-2375951-9 |
| 12 | X | 3-2366515-2 | 5-2366515-2 | 7-2366515-2 | 3-2366600-2 | 5-2366600-2 | 7-2366600-2 |
| | Y | 4-2366515-2 | 6-2366515-2 | 8-2366515-2 | 4-2366600-2 | 6-2366600-2 | 8-2366600-2 |
| 18 | X | 1-2423582-8 | 5-2423582-8 | 7-2423582-8 | 1-2423584-8 | 5-2423584-8 | 7-2423584-8 |
| | Y | 2-2423582-8 | 6-2423582-8 | 8-2423582-8 | 2-2423584-8 | 6-2423584-8 | 8-2423584-8 |
| 24 | X | 1-2420333-4 | 5-2420333-4 | 7-2420333-4 | 1-2420334-4 | 5-2420334-4 | 7-2420334-4 |
| | Y | 2-2420333-4 | 6-2420333-4 | 8-2420333-4 | 2-2420334-4 | 6-2420334-4 | 8-2420334-4 |

## Relative Product Information

Applicable contact...P.15
Performance & specifications...P.15

## Mated Dimensions



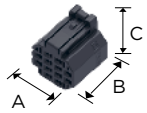

| Ps | H | L |
|---|---|---|
| 4 | 8.9 | 21.5 |
| 6 | 8.9 | 21.5 |
| 8 | 11 | 21.5 |
| 12 | 13 | 21.3 |

* Dimensions are in mm

# Slim Small Standard Types

## External Dimensions

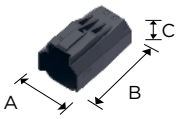
- Receptacle Housing




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | X | – | Black | 1-2366515-4 | 6.1 | 10.5 | 8.2 |
| | Y | | Black | 2-2366515-4 | | | |
| 6 | X | | Black | 1-2366515-6 | 8.8 | 10.5 | 8.2 |
| | Y | | Black | 2-2366515-6 | | | |
| 8 | X | | Black | 1-2366515-8 | 8.8 | 10.5 | 10.2 |
| | Y | | Black | 2-2366515-8 | | | |
| 12 | X | | Black | 3-2366515-2 | 11.5 | 11.3 | 12.2 |
| | Y | | Black | 4-2366515-2 | | | |

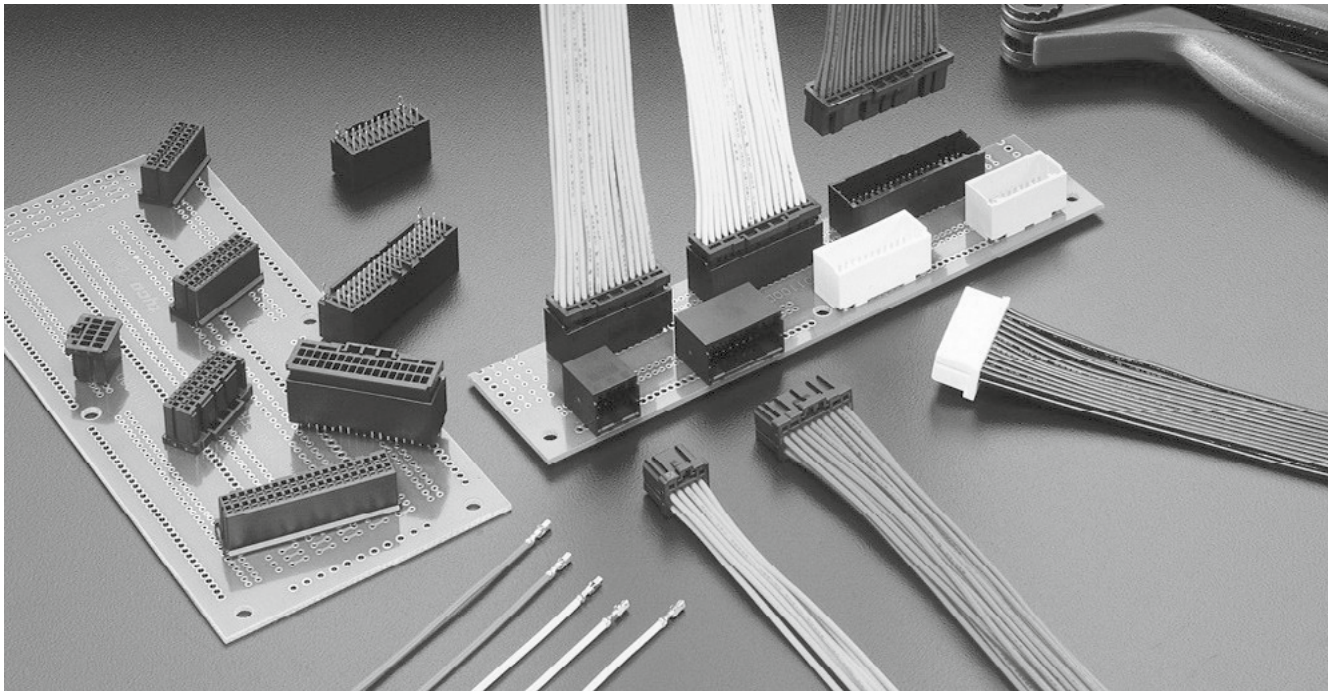
- Tab housing

Free Hanging type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | X | – | Black | 1-2366600-4 | 7.2 | 19 | 8.6 |
| | Y | | Black | 2-2366600-4 | | | |
| 6 | X | | Black | 1-2366600-6 | 9.9 | 19.7 | 8.6 |
| | Y | | Black | 2-2366600-6 | | | |
| 8 | X | | Black | 1-2366600-8 | 9.9 | 19.7 | 10.6 |
| | Y | | Black | 2-2366600-8 | | | |
| 12 | X | | Black | 3-2366600-2 | 12.6 | 21 | 12.6 |
| | Y | | Black | 4-2366600-2 | | | |

# D-1000 Series



## Series introduction

D-1000 Series are the smallest connectors for signal lines among all the Dynamic connector series.

The Dynamic 1000 Series connectors consists of 3 different pitch sizes: 2.0mm standard type, 2.5mm high-voltage type and 3.5mm type. As market needs change, the D-1000 series will evolve to meet those demands.

D-1000 Series has gold plated contacts to maintain its high reliability and also tin plated contacts for economical market needs. Customers can choose their own contacts according to specifications, applications and cost.

## Product Features

**1. Wide Applicable Wire**
From D-1000 series has wide applicable wire range of 30 AWG to 18 AWG with maximum 2.2 mm of outside diameter (D-1200/ D-1500). Therefore there are no special safety considerations using it in electrical cabinets.

**2. Hand Tools are available for all wire sizes.**
Standard crimping tools can be used for the D-1000 series by exchanging the die. The ability to exchange the die based on difference wire sizes helps shorten the lead-time and significantly reduces the cost of use for the hand tool.

**3. Housing and Contact Features**
**A) Housing products**
The D-1000 series consists of D-1100 series with 2.0mm pitch center line, D-1200 series with 2.5mm pitch center line.The D-1500 series is 3.5mm pitch.
In addition to black, the series is also available in other colors. Using different colors in the application can be helpful in reducing the assembly time.
**B) Contact Products**
D-1000 series provide gold plating contact as standard products and also tin plating contact for economical market needs. Choose contact according to specifications, application, quality level and cost.

**4. Other Features (Basic Dynamic series features)**

- Header connector and tab connector have enough length from the tip of contact to top of its housing. To prevent contact from bending during mating
- The positioning dowels in the housing and the terminals do not come into contact, so damage to the terminals during operation can be kept to a minimum.
- Clear identification of circuit number helps with correct wiring
- Metal retention leg on header prevents unwanted movement from cable tension
- Housing lock design helps avoid wire scratching

Note: All models are RoHS compliant.

# D-1000 Series Performance and Specifications

## Performance

| Item \ Series | D-1100 | D-1200 | D-1500 | D-1900 |
|---|---|---|---|---|
| Pitch | 2.0mm | 2.5mm | 3.5mm | 3.5mm |
| Rated voltage | 125V AC/DC | 250V AC/DC | 250V AC/DC | 150V AC/DC |
| Rated current (max) | 1 pos: 3A | 1 pos: 5A | 1 pos: 5A | 1 pos: 4A |
| | With WG22 | (With AWG18) | | With WG18 |
| Contact resistance | 20mΩ Max | | | 40mΩ Max |
| Withstanding voltage | 1,000V AC | 1,500V AC | 1,500V AC | 1,100V AC |
| Operating temperature | -55°C ~+105°C | | | -30°C ~+105°C |

## Positions / Wire size / Rated current

D-1100~1500 series

| Positions | Wire Size (AWG) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| 1 | 5 | 4 | 3 | 2.5 | 2 | 1.5 | 1 |
| 2-20 | 3.5 | 2.7 | 2.5 | 2 | 1.5 | 1 | 0.8 |
| 21-40 | — | — | 2 | 1.5 | 1 | 0.8 | 0.5 |

## Product Specification and Instruction Sheet

| | | |
|---|---|---|
| Product Specifications | | 108-78268 (gold-plated) |
| | | 108-78298 (tin-plated) |
| | | 108-78336 (D-1900) |
| Applications Specifications | | 114-5377 (D-1100, D-1200, D-1500) |
| | | 411-78291(D-1900) |
| Crimping tool instruction sheet | Part number: 1762952-1 | 408-10414-JPN |
| | Part number: 1762846-1 | |
| | Part number: 1762950-1 | |
| | Part number: 1762625-1 | |
| Extraction tool part number: 1891526-1 D-1900<br>Extraction tool part number: 1891348-1 | | 411-78241<br>411-78263 |

## Materials and Plating

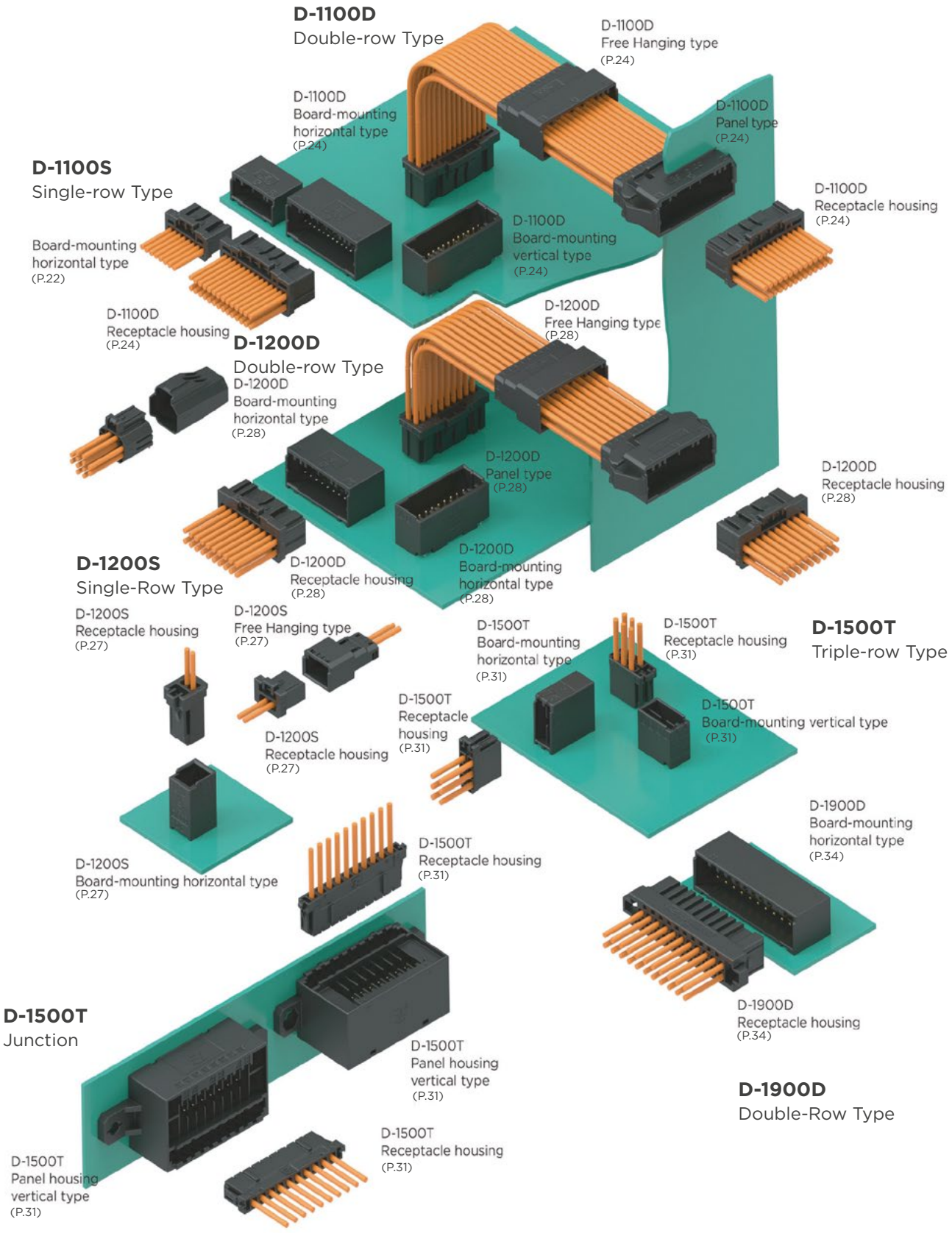
| Category | Material | Finish |
|---|---|---|
| Receptacle Contacts Tab Contact | Copper alloy | Tin-plating or 0.38μm gold-plating over 1.27μm Nickel under-plated |
| Board Mount Header | | 0.38 μm gold-plating over 1.27 μm Nickel under-plated<br>2.0 μm Tin-plating on tail side |
| Housing | UL94V-0, Thermoplastic PBT containing glass fiber | |

## Safety Standards *Remember to obtain Instruction Sheets when you choose to use these tools.

The safety specifications listed below are approved on specific part numbers. Please contact our sales department to check whether the part numbers you use are approved or not.

| Specifications \ Series | D-1100 | | | D-1200, D-1500 | | | D-1900 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Rated Voltage | Rated Current | Temperature Range | Rated Voltage | Rated Current | Temperature Range | Rated Voltage | Rated Current | Temperature Range |
| Product Specifications 108-78268 | 125V AC/DC | 3A (1 pos) | -55°C ~+105°C | 250V AC/DC | 5A (1 pos) | -55°C~+105°C | 150V AC/DC | 4A (1 pos) | -30°C ~+105°C |
| UL File No.E28476 | Based on requirements of Application | | — | Based on requirements of Application | | — | Based on requirements of Application | | — |
| TÜV | 125V AC/DC | AWG / A(1pos): 22/3, 24/2.5, 26/2, 28/1.5, 30/1 | -55°C ~+105°C | | AWG / A(1pos): 18/5, 20/4, 22/3, 24/2.5, 26/2, 28/1.5, 30/1 | -55°C ~+105°C | | AWG / A(1pos): 18/4, 20/3, 22/2.5, 24/2 | -30°C ~+105°C |

# D-1000 Series Configurations

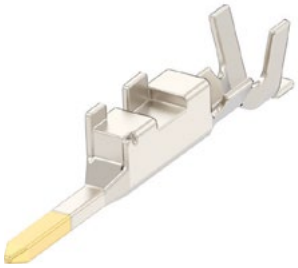


# D-1000 Series Contact

## Crimp Contacts



Receptacle Contact
(for Receptacle housing)



Tab contact
(for Tab housing)

| Wire range | | | | Plating | Receptacle Contact | | TAB Contact | | Application Toolings | |
|---|---|---|---|---|---|---|---|---|---|---|
| AWG | mm² | Outer diameter of insulation mm | Wire Range mark | | Strip Form | Loose Piece | Strip Form | Loose Piece | CCII hand tool PEW12 hand tool* (PEW12 dies Only) | Mini Appli-cator |
| 30<br>28 | 0.05<br>0.10 | 0.6-1.2 | S | 15μ" [0.38μm] Gold | 1827569-2 | 1827586-2 | 1903111-2 | 1903115-2 | 2119144-1<br>1762952-1*<br>(1762453-1) | 2114042-2 |
| | | | | 8μ" [0.20μm] Gold | 1827569-4 | 1827586-4 | 1903111-4 | 1903115-4 | | |
| | | | | Tin | — | — | — | — | | |
| 28<br>26<br>24<br>22 | 0.05<br>0.10<br>0.20<br>0.37 | 1.08-1.6 | M | 15μ" [0.38μm] Gold | 1827570-2 | 1827587-2 | 1903112-2 | 1903116-2 | 2119141-1<br>1762846-1*<br>(1762847-1) | 2151082-1 |
| | | | | 8μ" [0.20μm] Gold | 1827570-4 | 1827587-4 | 1903112-4 | 1903116-4 | | |
| | | | | Tin | 1871303-1 | 1871743-1 | 1903120-1 | 1903124-1 | | |
| 28<br>26<br>24<br>22 | 0.05<br>0.10<br>0.20<br>0.37 | 1.08-1.9 | L | 15μ" [0.38μm] Gold | 1827571-2 | 1827588-2 | 1903113-2 | 1903117-2 | 2119143-1<br>1762950-1*<br>(1762951-1) | 2114043-2 |
| | | | | 8μ" [0.20μm] Gold | 1827571-4 | 1827588-4 | 1903113-4 | 1903117-4 | | |
| | | | | Tin | 1871304-1 | 1871744-1 | 1903121-1 | 1903125-1 | | |
| 22<br>20<br>18 | 0.34-0.37<br>0.51-0.53<br>0.85-0.87 | 1.4-2.2 | 2L | 15μ" [0.38μm] Gold | 1827572-2 | 1827589-2 | 1903114-2 | 1903118-2 | 2119142-1<br>1762625-1*<br>(1762626-1) | 2151083-1 |
| | | | | 8μ" [0.20μm] Gold | 1827572-4 | 1827589-4 | 1903114-4 | 1903118-4 | | |
| | | | | Tin | 1871731-1 | 1871745-1 | 1903122-1 | 1903126-1 | | |

Remarks:

**The contacts L and 2L do not fit into the D-1100 receptacle housing and tab housing.**
When ordering, specify your requirements by multiplying the quality.
Contact our Sales Department for more information.
Gold plating: 0.38μm or 0.20μm
Tin plating: 2.0μm
For mini-applicators information, contact our Sales Department.

Keying plug: 1939588-1

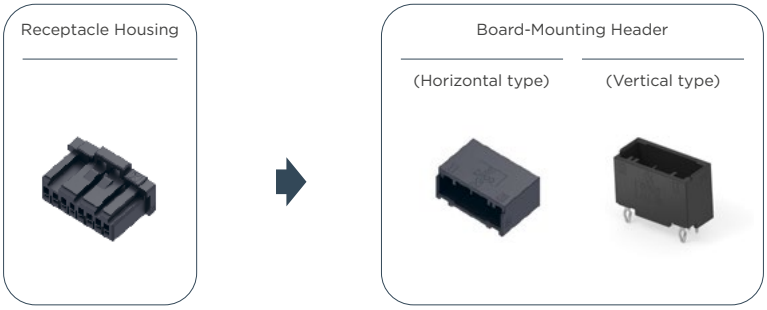
Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.
*With die set
Keying Plug with flip locator use CCII hand tools (CERT®CRIMPII)

PEW12 dies are interchangeable hand tools.
* Only hand tools are available with dies, part number 9-147824D-0

Receptacle contacts are only available for receptacle housings, while the Tab housings are only available for tab housings.
Refer to pages P.121-125 for details of applicable tools.

# D1100S Single-row Standard Types – 2mm pin pitch

## Type Chart

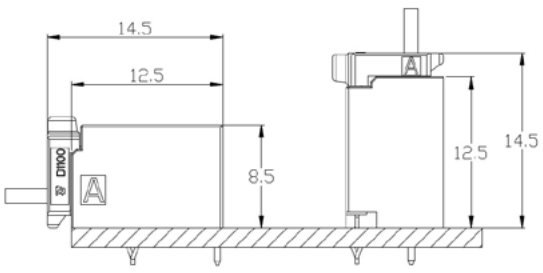



| POS | Color | Key | Receptacle housing | Board-Mounting Header | | |
|---|---|---|---|---|---|---|
| | | | | Plating | Horizontal type | Vertical type |
| 4 | Black | X | 1-1939758-4 | Gold | 1-1939760-4 | 1-2394617-4 |
| | | | | Tin | 1-1939761-4 | 1-2390471-4 |
| | Black | Y | 2-1939758-4 | Gold | 2-1939760-4 | 2-2394617-4 |
| | | | | Tin | — | 2-2390471-4 |
| 8 | Black | X | 1-1939758-8 | Gold | 1-1939760-8 | 1-2394617-8 |
| | | | | Tin | — | 1-2390471-8 |
| | Black | Y | 2-1939758-8 | Gold | 2-1939760-8 | 2-2394617-8 |
| | | | | Tin | — | 2-2390471-8 |
| 10 | Black | X | 1-1939758-0 | Gold | 1-1939760-0 | 1-2394617-0 |
| | | | | Tin | 1-1939761-0 | 1-2390471-0 |
| | Black | Y | 2-1939758-0 | Gold | 2-1939760-0 | 2-2394617-0 |
| | | | | Tin | — | 2-2390471-0 |
| 12 | Black | X | 1-1939758-1 | Tin | — | 1-2390471-1 |
| 16 | Black | X | 1-1939758-3 | Gold | — | 1-2394617-3 |
| | | | | Tin | 1-1939761-3 | 1-2390471-3 |
| | | Y | 2-1939758-3 | Gold | — | 2-2394617-3 |
| | | | | Tin | 2-1939761-3 | 2-2390471-3 |

## Relative Product Information

Applicable contact ...P.21
Performance & Specifications ...P.19

## Mated Dimensions



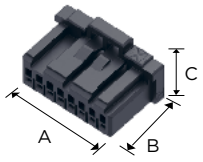

Horizontal type / Vertical type

Dimensions are in mm
Note: All Part Numbers are RoHS compliant.

# D1100S Single-row Standard Types – 2mm pin pitch

## External Dimensions

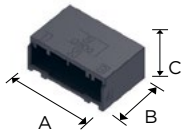
- Receptacle Housing




| POS | Color | Key | Receptacle housing | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | Black | X | 1-1939758-4 | 8.9 | 11.3 | 9.15 |
| | Black | Y | 2-1939758-4 | | | |
| 8 | Black | X | 1-1939758-8 | 16.9 | | |
| | Black | Y | 2-1939758-8 | | | |
| 10 | Black | X | 1-1939758-0 | 20.9 | | |
| | Black | Y | 2-1939758-0 | | | |
| 12 | Black | X | 1-1939758-1 | 24.9 | | |
| | Black | Y | 2-1939758-1 | | | |
| 16 | Black | X | 1-1939758-3 | 32.9 | | |
| | Black | Y | 2-1939758-3 | | | |

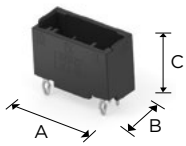
- Board-Mounting Header

Horizontal type




| POS | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | Black | X | Gold | 1-1939760-4 | 10.6 | 12.5 | 8.5 |
| | Black | | Tin | 1-1939761-4 | | | |
| | Black | Y | Gold | 2-1939760-4 | | | |
| | Black | | Tin | 2-1939761-4 | | | |
| 8 | Black | X | Gold | 1-1939760-8 | 18.6 | | |
| | Black | | Tin | — | | | |
| | Black | Y | Gold | 2-1939760-8 | | | |
| | Black | | Tin | — | | | |
| 10 | Black | X | Gold | 1-1939760-0 | 22.6 | | |
| | Black | | Tin | 1-1939761-0 | | | |
| | Black | Y | Gold | 2-1939760-0 | | | |
| | Black | | Tin | 2-1939761-0 | | | |
| 12 | Black | X | Tin | — | — | — | — |
| | Black | Y | Tin | | | | |
| 16 | Black | X | Tin | 1-1939761-3 | 34.6 | 12.5 | 8.5 |
| | Black | Y | Tin | 2-1939761-3 | | | |

Vertical type

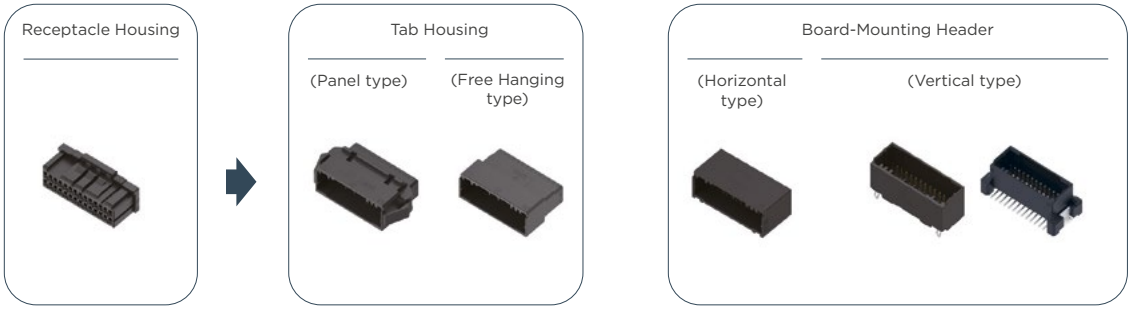



| POS | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | Black | X | Gold | 1-2394617-4 | 10.6 | 8.0 | 12.5 |
| | Black | | Tin | 1-2390471-4 | | | |
| | Black | Y | Gold | 2-2394617-4 | | | |
| | Black | | Tin | — | | | |
| 8 | Black | X | Gold | 1-2394617-8 | 18.6 | | |
| | Black | | Tin | 1-2390471-8 | | | |
| | Black | Y | Gold | 2-2394617-8 | | | |
| | Black | | Tin | 2-2390471-8 | | | |
| 10 | Black | X | Gold | 1-2394617-0 | 22.6 | | |
| | Black | | Tin | 1-2390471-0 | | | |
| | Black | Y | Gold | 2-2394617-0 | | | |
| | Black | | Tin | — | | | |
| 12 | Black | X | Tin | 1-2390471-1 | 26.6 | | |
| 16 | Black | X | Gold | 1-2394617-3 | 34.6 | | |
| | | | Tin | 1-2390471-3 | | | |
| | | Y | Gold | 2-2394617-3 | | | |
| | | | Tin | 2-2390471-3 | | | |

Note: All Part Numbers are RoHS compliant.

# D-1100D Double-row Standard Types – 2mm pin pitch

## Type Chart




| POS | Color | Key | Receptacle Housing | | Tab Housing | | Board-Mounting Header | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Standard | High-retention force | Panel type | Free hanging type | Plating | Horizontal type | Vertical type | | |
| | | | | | | | | THT | THT | Reflow/THR | Reflow/SMT |
| 10 | Black | X | 1-1827862-5<br>9-1827862-5* | 1-2333149-5 | 1-2069681-5 | 1-2069682-5 | Gold | 1-1827873-5 | 1-2040516-5 | — | — |
| | | | | | | | Tin | 1-2271887-5 | 1-2341421-5 | — | — |
| 18 | Black | X | 1-1827862-9 | — | — | — | Gold | — | 1-2040516-9 | — | — |
| | | | | | | | Tin | — | 1-2341421-9 | — | — |
| 20 | Black | X | 1-1827862-0 | 1-2333149-0 | — | — | Gold | 1-1827873-0 | 1-2040516-0 | — | — |
| | | | | | | | Tin | 1-2271887-0 | 1-1554590-0 | — | — |
| | | | | | | | | | 1-2341421-0 | | |
| 22 | Black | X | 1-1827863-1 | 1-2333134-1 | 1-1903128-1 | 1-1903127-1 | Gold | — | 1-1827872-1 | — | — |
| | | | | | | | Tin | — | 1-1871315-1 | — | — |
| 24 | Black | X | 1-1827863-2 | 1-2333134-2 | — | — | Gold | — | 1-1827872-2 | 1-2429955-2 | — |
| | | | | | | | Tin | — | 1-1871315-2 | — | — |
| | Black | Y | 2-1827863-2 | — | — | — | Gold | — | — | 2-2429955-2 | — |
| 26 | Black | X | 1-1827863-3 | 1-2333134-3 | 1-1903128-3 | 1-1903127-3<br>1-2468186-3* | Gold | 1-1939638-3 | 1-1827872-3 | — | 1-1939995-3<br>1-2339471-3 |
| | | | | | | | Tin | 1-2372488-3 | 1-1871315-3 | — | — |
| | Black | Y | 2-1827863-3 | — | — | — | Gold | — | — | — | 2-1939995-3 |
| 28 | Black | X | 1-1827863-4 | 1-2333134-4 | 1-1903128-4 | 1-1903127-4 | Gold | 1-1939638-4 | 1-1827872-4 | — | — |
| | | | | | | | Tin | 1-2372488-4 | 1-1871315-4 | — | — |
| 30 | Black | X | 1-1827863-5 | 1-2333134-5 | — | — | Gold | 1-1939638-5 | 1-1827872-5 | — | — |
| | | | | | | | Tin | 1-2372488-5 | 1-1871315-5 | — | — |
| 32 | Black | X | 1-1827863-6 | 1-2333134-6 | 1-1903128-6 | 1-1903127-6 | Gold | — | 1-1827872-6 | — | — |
| | | | | | | | Tin | — | 1-1871315-6 | — | — |
| 34 | Black | X | 1-1827863-7 | 1-2333134-7 | 1-1903128-7 | 1-1903127-7 | Gold | 1-1939638-7 | 1-1827872-7 | — | — |
| | | | | | | | Tin | 1-2372488-7 | 1-1871315-7 | — | — |
| | Black | Y | 2-1827863-7 | — | — | — | Gold | — | 2-1827872-7 | — | — |
| | | | | | | | Tin | — | 2-1871315-7 | — | — |
| 40 | Black | X | 1-1827863-0 | 1-2333134-0 | 1-1903128-0<br>1-2350416-0* | 1-1903127-0 | Gold | 1-1939638-0 | 1-1827872-0 | — | 1-1939995-0 |
| | | | | | | | Tin | 1-2372488-0 | 1-1871315-0 | — | — |
| | Black | Y | 2-1827863-0 | — | — | — | Gold | — | 2-1827872-0 | — | 2-1939995-0 |

* latch-protected product with different locking heights.

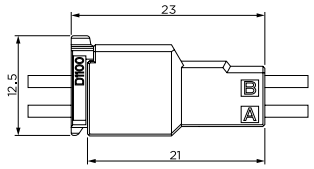
## Relative Product Information

Applicable contact ...P.21
Performance & Specifications ...P.19

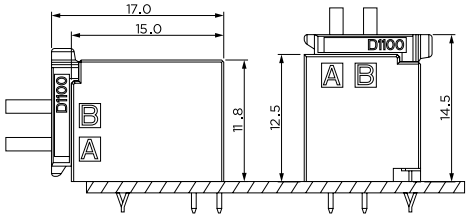
Note: All Part Numbers are RoHS compliant.

# D-1100D Double-Row Standard Types — 2mm pin pitch

## Mated Dimension




Panel/Free Hanging type

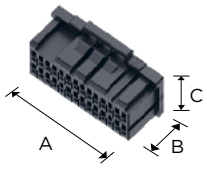



Horizontal/Vertical type

Dimensions are in mm

## External Dimensions

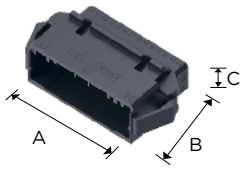
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 10 | X | Black | 1-1827862-5 | 12.6 | 11.3 | 12.5 |
| | | | 1-2333149-5 | | | |
| 18 | X | Black | 1-1827862-9 | 20.6 | | |
| 20 | X | Black | 1-1827862-0 | 22.6 | | |
| | | | 1-2333149-0 | | | |
| 22 | X | Black | 1-1827863-1 | 24.6 | | |
| | | | 1-2333134-1 | | | |
| 24 | X | Black | 1-1827863-2 | 26.6 | | |
| | | | 1-2333134-2 | | | |
| 26 | X | Black | 1-1827863-3 | 28.6 | | |
| | | | 1-2333134-3 | | | |
| | Y | Black | 2-1827863-3 | | | |
| 28 | X | Black | 1-1827863-4 | 30.6 | | |
| | | | 1-2333134-4 | | | |
| 30 | X | Black | 1-1827863-5 | 32.6 | | |
| | | | 1-2333134-5 | | | |
| 32 | X | Black | 1-1827863-6 | 34.6 | | |
| | | | 1-2333134-6 | | | |
| 34 | X | Black | 1-1827863-7 | 36.6 | | |
| | | | 1-2333134-7 | | | |
| | Y | Black | 2-1827863-7 | | | |
| 40 | X | Black | 1-1827863-0 | 42.6 | | |
| | Y | Black | 1-1827863-0 | | | |

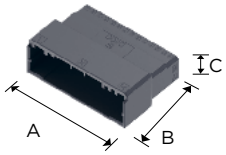
- Tab housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 10 | X | Black | 1-2069681-5 | 22.1 | 21.0 | 13.9 |
| 22 | X | Black | 1-1903128-1 | 34.1 | | |
| 26 | X | Black | 1-1903128-3 | 38.1 | | |
| 28 | X | Black | 1-1903128-4 | 40.1 | | |
| 32 | X | Black | 1-1903128-6 | 44.1 | | |
| 34 | X | Black | 1-1903128-7 | 46.1 | | |
| 40 | X | Black | 1-1903128-0 | 52.1 | | |

Free Hanging type



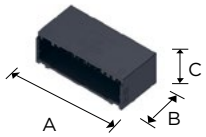

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 10 | X | Black | 1-2069682-5 | 12.6 | 21.0 | 11.3 |
| 22 | X | Black | 1-1903127-1 | 24.6 | | |
| 26 | X | Black | 1-1903127-3 | 28.6 | | |
| 28 | X | Black | 1-1903127-4 | 30.6 | | |
| 32 | X | Black | 1-1903127-6 | 34.6 | | |
| 34 | X | Black | 1-1903127-7 | 36.6 | | |
| 40 | X | Black | 1-1903127-0 | 42.6 | | |

Note: All Part Numbers are RoHS compliant.

# D-1100D Double row Standard Types – 2mm pin pitch

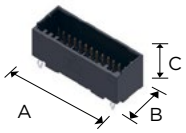
## Board-Mounting Header

Horizontal type




| Pos | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 10 | Black | X | Gold | 1-1827873-5 | 12.6 | 15.0 | 11.8 |
| | | | Tin | 1-2271887-5 | | | |
| 20 | Black | X | Gold | 1-1827873-0 | 22.6 | | |
| | | | Tin | 1-2379284-0 | | | |
| 26 | Black | X | Gold | 1-1939638-3 | 28.6 | | |
| | | | Tin | 1-2372488-3 | | | |
| 28 | Black | X | Gold | 1-1939638-4 | 30.6 | | |
| | | | Tin | 1-2372488-4 | | | |
| 30 | Black | X | Gold | 1-1939638-5 | 32.6 | | |
| | | | Tin | 1-2372488-5 | | | |
| 34 | Black | X | Gold | 1-1939638-7 | 36.6 | | |
| | | | Tin | 1-2372488-7 | | | |
| 40 | Black | X | Gold | 1-1939638-0 | 42.6 | | |
| | | | Tin | 1-2372488-0 | | | |

Vertical type

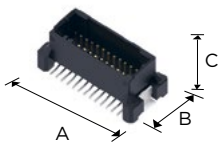



| Pos | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 10 | Black | X | Gold | 1-2040516-5 | 12.6 | 11.3 | 12.5 |
| | Black | | Tin | 1-2341421-5 | | | |
| 18 | Black | X | Gold | 1-2040516-9 | 20.6 | | |
| | Black | | Tin | 1-2341421-9 | | | |
| 20 | Black | X | Gold | 1-2040516-0 | 22.6 | | |
| | Black | | Tin | 1-1554590-0 | | | |
| | Black | | | 1-2341421-0 | | | |
| 22 | Black | X | Gold | 1-1827872-1 | 24.6 | | |
| | Black | | Tin | 1-1871315-1 | | | |
| 24 | Black | X | Gold | 1-1827872-2 | 26.6 | | |
| | Black | | | 1-2429955-2 | | | |
| | Black | | Tin | 1-1871315-2 | | | |
| | Black | | Gold | 2-2429955-2 | | | |
| 26 | Black | X | Gold | 1-1827872-3 | 28.6 | | |
| | Black | | Tin | 1-1871315-3 | | | |
| 28 | Black | X | Gold | 1-1827872-4 | 30.6 | | |
| | Black | | Tin | 1-1871315-4 | | | |
| 30 | Black | X | Gold | 1-1827872-5 | 32.6 | | |
| | Black | | Tin | 1-1871315-5 | | | |
| 32 | Black | X | Gold | 1-1827872-6 | 34.6 | | |
| | Bla-ack | | Tin | 1-1871315-6 | | | |
| 34 | Black | X | Gold | 1-1827872-7 | 36.6 | | |
| | Black | | Tin | 1-1871315-7 | | | |
| | Black | Y | Gold | 2-1827872-7 | | | |
| | Black | | Tin | 2-1871315-7 | | | |
| 40 | Black | X | Gold | 1-1827872-0 | 42.6 | | |
| | Black | | Tin | 1-1871315-0 | | | |
| | Black | Y | Gold | 2-1827872-0 | | | |

# SMT

## Board-Mounting Header

Vertical type



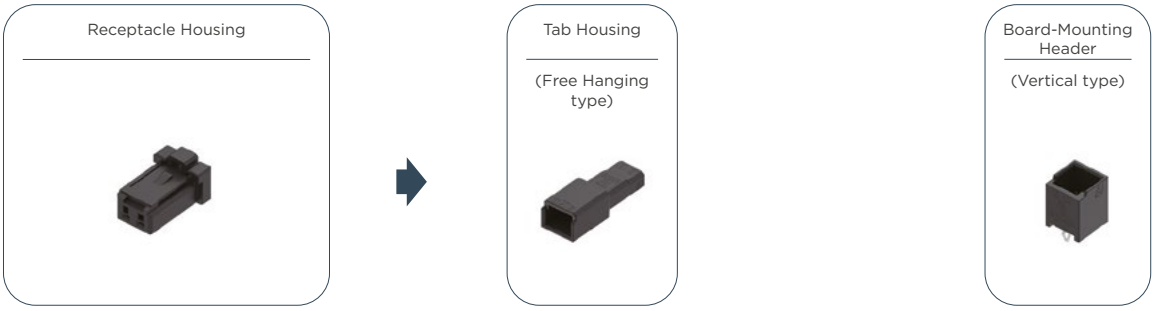

| Pos | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 26 | Black | X | Gold | 1-1939995-3 | 34.6 | 16.3 | 13.5 |
| | Black | | | 1-2339471-3* | | | |
| | Black | Y | | 2-1939995-3 | | | |
| 40 | Black | X | | 1-1939995-0 | 48.6 | | |
| | Black | Y | | 2-1939995-0 | | | |

* Packaging form: emboss.

Note: All Part Numbers are RoHS compliant.

# D-1200S Single Row/High Voltage Types – 2.5mm pin pitch

## Type Chart

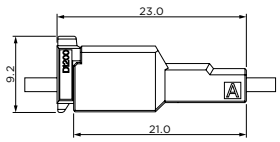



| POS | Color | Key | Receptacle housing | | Tab housing | | Board-Mounting Header | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Standard | High-retention force | Panel type | Free hanging type | Plating | Horizontal type | Vertical type |
| 2 | Black | X | 1-1871465-2 | 1-2443800-2 | — | 1-1903129-2 | Gold | — | 1-1871468-2 |
| | | | | | | | Tin | — | 1-2348456-2 |

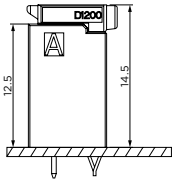
## Relative Product Information

Applicable contact ...P.21
Performance & Specifications ...P.19

## Mated Dimension



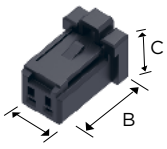

Free Hanging type




Vertical type

## External Dimensions

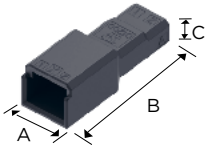
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-1871465-2<br>1-2443800-2 | 7.6 | 11.3 | 9.2 |

- Tab Housing

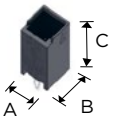
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-1903129-2 | 7.6 | 21.0 | 8.0 |

- Board-Mounting Header

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-1871468-2 | 7.6 | 8.0 | 12.5 |
| | | Tin | | 1-2348456-2 | | | |

# D-1200D Double Row High Voltage Types – 2.5mm pin pitch

## Type Chart




| POS | Color | Key | Receptacle housing | | | Tab housing | | Board-Mounting Header | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Standard | latch-protected | High-retention force | Panel type | Free hanging type | Plating | Horizontal type | Vertical type | |
| | | | | | | | | | Standard | Standard | Vertical Reflow/ THR |
| 4 | Black | X | 1-1827864-2 | 9-1827864-2 | 1-2349949-2 | 1-1903131-2 | 1-1903130-2 | Gold | 1-1827876-2 | 1-1827875-2 | 1-2429946-2 |
| | | | | | | | | Tin | 1-2348455-2 | 1-2348454-2 | — |
| | Black | Y | 2-1827864-2 | — | — | — | — | Gold | 2-1827876-2 | 2-1827875-2 | — |
| 6 | Black | X | 1-1827864-3 | 9-1827864-3 | — | 1-1903131-3 | 1-1903130-3 | Gold | 1-1827876-3 | 1-1827875-3 | 1-2429946-3 |
| | | | | | | | | Tin | 1-2348455-3 | 1-2348454-3 | — |
| | Black | Y | 2-1827864-3 | — | — | 2-1903131-3 | 2-1903130-3 | Gold | 2-1827876-3 | 2-1827875-3 | — |
| 8 | Black | X | 1-1827864-4 | 9-1827864-4 ** | 1-2349949-4 | 1-1903131-4 | 1-1903130-4 | Gold | 1-1827876-4 | 1-1827875-4 | 1-2429946-4 |
| | | | | | | | | Tin | 1-2348455-4 | 1-2348454-4 | — |
| | Black | Y | 2-1827864-4 | — | — | 2-1903131-4 | 2-1903130-4 | Gold | 2-1827876-4 | 2-1827875-4 | — |
| 10 | Black | X | 1-1827864-5 | — | — | — | — | Gold | 1-1827876-5 | 1-1827875-5 | — |
| | | | | | | | | Tin | — | 1-2348454-5 | — |
| | Black | Y | 2-1827864-5 | — | — | — | — | Gold | — | 2-1827875-5 | — |
| 12 | Black | X | 1-1827864-6 | 9-1827864-6 | 1-2349949-6 | 1-1903131-6 | 1-1903130-6<br>1-2468187-6* | Gold | 1-1827876-6 | 1-1827875-6 | — |
| | | | | | | | | Tin | 1-2348455-6 | 1-2348454-6 | — |
| | Black | Y | 2-1827864-6 | — | 2-2349949-6 | 2-1903131-6 | 2-1903130-6<br>2-2468187-6* | Gold | — | 2-1827875-6 | — |
| 16 | Black | X | 1-1827864-8 | — | — | — | — | Gold | 1-1827876-8 | 1-1827875-8 | — |
| | | | | | | | | Tin | — | 1-2348454-8 | — |
| | Black | Y | 2-1827864-8 | — | — | — | — | Gold | — | 2-1827875-8 | — |
| 20 | Black | X | 1-1827864-0 | 9-1827864-0 ** | 1-2349949-0 | 1-1903131-0 | 1-1903130-0 | Gold | 1-1827876-0 | 1-1827875-0 | — |
| | | | | | | | | Tin | 1-2348455-0 | 1-2348454-0 | — |
| | Black | Y | 2-1827864-0 | — | — | 2-1903131-0 | 2-1903130-0 | Gold | 2-1827876-0 | 2-1827875-0 | — |

* The product marked with "*" is high-retention force version of receptacle housing.
** Preliminary to release

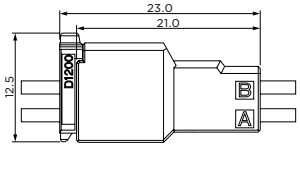
## Relative Product Information

Applicable contact ...P.21
Performance & Specifications ...P.19

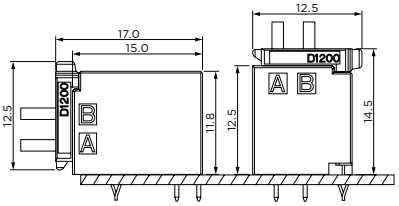
Note: All Part Numbers are RoHS compliant.

# D-1200D Double-row High-voltage Types – 2.5mm pin pitch

## Mated Dimension



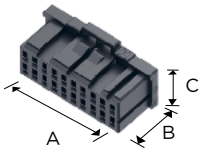

Panel /Free Hanging type




Horizontal /Vertical type

## External Dimensions

- Receptacle Housing




| POS | Color | Key | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | Black | X | 1-1827864-2 | 7.6 | 11.3 | 12.5 |
| | Black | | 9-1827864-2* | | | 12.7 |
| | Black | | 1-2349949-2** | | | 12.5 |
| | Black | Y | 2-1827864-2 | | | 12.5 |
| 6 | Black | X | 1-1827864-3 | 10.1 | | 12.5 |
| | Black | | 9-1827864-3* | | | 12.7 |
| | Black | Y | 2-1827864-3 | | | 12.5 |
| 8 | Black | X | 1-1827864-4 | 12.6 | | 12.5 |
| | Black | | 9-1827864-4* | | | 12.7 |
| | Black | | 1-2349949-4** | | | 12.5 |
| | Black | Y | 2-1827864-4 | | | 12.5 |
| 10 | Black | X | 1-1827864-5 | 15.1 | | 12.5 |
| | Black | Y | 2-1827864-5 | | | 12.5 |
| 12 | Black | X | 1-1827864-6 | 17.6 | | 12.5 |
| | Black | | 9-1827864-6* | | | 12.7 |
| | Black | | 1-2349949-6** | | | 12.5 |
| | Black | Y | 2-1827864-6 | | | 12.5 |
| | Black | | 2-2349949-6** | | | 12.5 |
| 16 | Black | X | 1-1827864-8 | 22.6 | | 12.5 |
| | Black | Y | 2-1827864-8 | | | 12.5 |
| 20 | Black | X | 1-1827864-0 | 27.6 | | 12.5 |
| | Black | | 9-1827864-0* | | | 12.7 |
| | Black | | 1-2349949-0** | | | 12.5 |
| | Black | Y | 2-1827864-0 | | | 12.5 |

- The product marked with "*" is protective latch version. 8pos and 20pos are in preliminary to release.
- The product marked with "**" is high-retention force version of receptacle housing



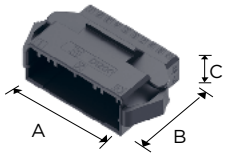
Standard products:
6P; key X:
1-1827864-3



Products with protective latches: 6P; key X:
9-1827864-3

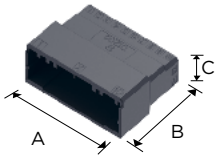
- Tab Housing

Panel type




| POS | Color | Key | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | Black | X | 1-1903131-2 | 17.1 | 21.0 | 13.9 |
| 6 | Black | X | 1-1903131-3 | 19.6 | 21.0 | |
| | | Y | 2-1903131-3 | | | |
| 8 | Black | X | 1-1903131-4 | 22.1 | 21.0 | |
| | | Y | 2-1903131-4 | | | |
| 12 | Black | X | 1-1903131-6 | 27.1 | 21.0 | |
| | | Y | 2-1903131-6 | | | |
| 20 | Black | X | 1-1903131-0 | 37.1 | 21.0 | |
| | | Y | 2-1903131-0 | | | |

Free Hanging type



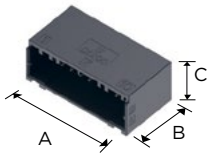

| POS | Color | Key | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | Black | X | 1-1903130-2 | 7.6 | 21.0 | 11.3 |
| 6 | Black | X | 1-1903130-3 | 10.1 | | |
| | | Y | 2-1903130-3 | | | |
| 8 | Black | X | 1-1903130-4 | 12.6 | | |
| | | Y | 2-1903130-4 | | | |
| 12 | Black | X | 1-1903130-6 | 17.6 | | |
| | | | 1-2468187-6* | | | |
| | | Y | 2-1903130-6 | | | |
| | | | 2-2468187-6* | | | |
| 20 | Black | X | 1-1903130-0 | 27.6 | | |
| | | Y | 2-1903130-0 | | | |

* The product marked with "*" is high-retention force version of Tab housing

Note: All Part Numbers are RoHS compliant.

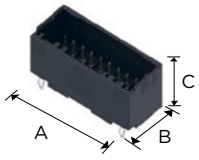
# D-1200D Double Row High Voltage Types – 2.5mm pin pitch

## Board-Mounting Header
Horizontal type




| POS | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | Black | X | Gold | 1-1827876-2 | 7.6 | 15.0 | 11.8 |
| | Black | | Tin | 1-2348455-2 | | | |
| | Black | Y | Gold | 2-1827876-2 | | | |
| 6 | Black | X | Gold | 1-1827876-3 | 10.1 | | |
| | Black | | Tin | 1-2348455-3 | | | |
| | Black | Y | Gold | 2-1827876-3 | | | |
| 8 | Black | X | Gold | 1-1827876-4 | 12.6 | | |
| | Black | | Tin | 1-2348455-4 | | | |
| | Black | Y | Gold | 2-1827876-4 | | | |
| 10 | Black | X | Gold | 1-1827876-5 | 15.1 | | |
| 12 | Black | X | Gold | 1-1827876-6 | 17.6 | | |
| | Black | | Tin | 1-2348455-6 | | | |
| 16 | Black | X | Gold | 1-1827876-8 | 22.6 | | |
| 20 | Black | X | Gold | 1-1827876-0 | 27.6 | | |
| | Black | | Tin | 1-2348455-0 | | | |
| | Black | Y | Gold | 2-1827876-0 | | | |

## Board-Mounting Header
Vertical type

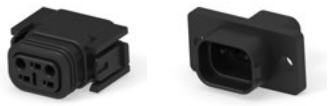



| POS | Color | Key | Plating | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | Black | X | Gold | 1-1827875-2 | 7.6 | 11.3 | 12.6 |
| | | | | 1-2429946-2* | | | |
| | | | Tin | 1-2348454-2 | | | |
| | | Y | Gold | 2-1827875-2 | | | |
| 6 | Black | X | Gold | 1-1827875-3 | 10.1 | | |
| | | | | 1-2429946-3* | | | |
| | | | Tin | 1-2348454-3 | | | |
| | | Y | Gold | 2-1827875-3 | | | |
| 8 | Black | X | Gold | 1-1827875-4 | 12.6 | | |
| | | | | 1-2429946-4* | | | |
| | | | Tin | 1-2348454-4 | | | |
| | | Y | Gold | 2-1827875-4 | | | |
| 10 | Black | X | Gold | 1-1827875-5 | 15.1 | | |
| | | | Tin | 1-2348454-5 | | | |
| | | Y | Gold | 2-1827875-5 | | | |
| 12 | Black | X | Gold | 1-1827875-6 | 17.6 | | |
| | | | Tin | 1-2348454-6 | | | |
| | | Y | Gold | 2-1827875-6 | | | |
| 16 | Black | X | Gold | 1-1827875-8 | 22.6 | | |
| | | | Tin | 1-2348454-8 | | | |
| | | Y | Gold | 2-1827875-8 | | | |
| 20 | Black | X | Gold | 1-1827875-0 | 27.6 | | |
| | | | Tin | 1-2348454-0 | | | |
| | | Y | Gold | 2-1827875-0 | | | |

* The product marked with "*" is through hole Reflow version.

# Fan Motor Water-Proof 3P

## Wire-To-Wire
Panel mount type

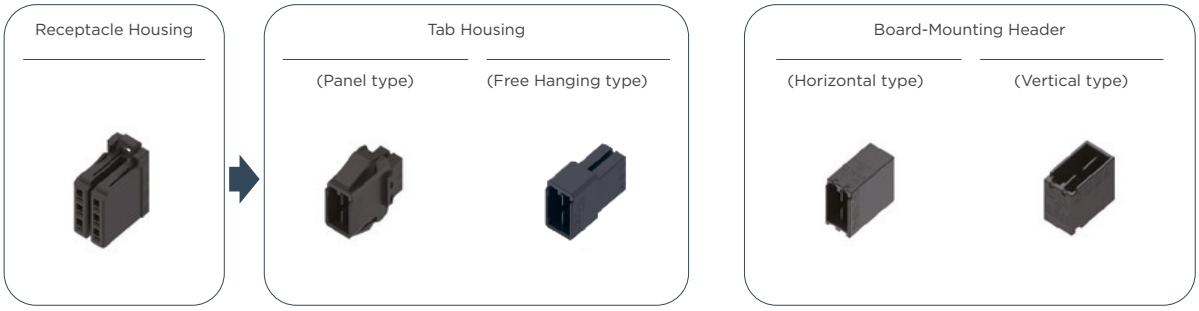


| POS | Color | Plug housing | Cap housing – Panel type | Product Specification |
|---|---|---|---|---|
| 3 | Black | 2013891-1 | 2013892-1 | 108-78519 |

Note: All Part Numbers are RoHS compliant.

# D-1500T Triple-row High-voltage Modular Type – 3.5mm pin pitch

## Type Chart

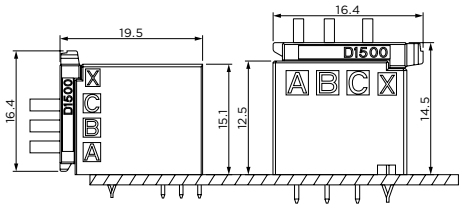



| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 3 | Black | X | 1-1827579-1 | — | 1-2040444-1 | — | — | 1-1827581-1 |
| 6 | Black | X | 1-2069029-2 | 1-2040404-2 | 1-2040444-2 | Gold | 1-1827583-2 | 1-1827581-2 |
| 9 | Black | X | 1-2069029-3 | — | 1-2040444-3 | | — | 1-1827581-3 |
| 12 | Black | X | 1-2069029-4 | — | 1-2040444-4 | | — | 1-1827581-4 |
| 36 | Black | X | — | 3-2040404-2 | — | | — | — |

## Relative Product Information

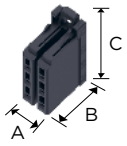
Applicable contact ...P.21
Performance & Specifications ...P.19

## Mated Dimension




Horizontal /Vertical type

## Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1827579-1 | 3.3 | 11.3 | 16.4 |
| 6 | X | Black | 1-2069029-2 | 6.8 | | |
| 9 | X | Black | 1-2069029-3 | 10.3 | | |
| 12 | X | Black | 1-2069029-4 | 13.8 | | |

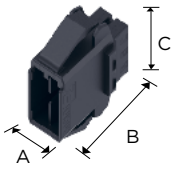
Note: All Part Numbers are RoHS compliant.

# D-1500T Triple-row High-voltage Modular Type – 3.5mm pin pitch

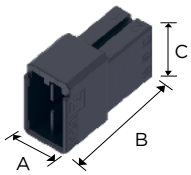
## External Dimensions

- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 1-2040404-2 | 8.5 | 21.0 | 24.5 |
| 36 | X | Black | 3-2040404-2 | 43.5 | | |

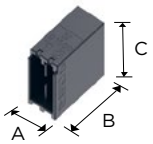



Free Hanging type

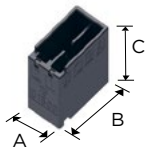
| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-2040444-1 | 3.0 | 21.0 | 15.0 |
| 6 | X | Black | 1-2040444-2 | 6.5 | | |
| 9 | X | Black | 1-2040444-3 | 10.0 | | |
| 12 | X | Black | 1-2040444-4 | 13.5 | | |

- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | X | Gold | Black | 1-1827583-2 | 8.1 | 17.5 | 15.1 |



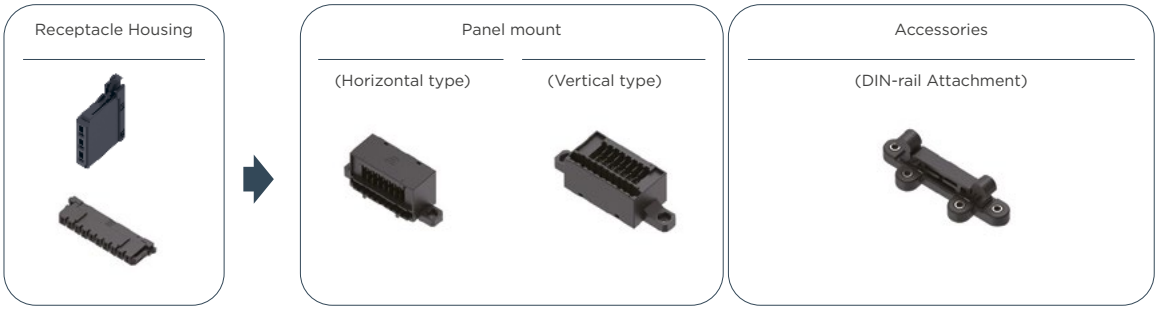

Vertical type

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1-1827581-1 | 4.6 | 14.6 | 12.5 |
| 6 | X | Gold | Black | 1-1827581-2 | 8.1 | | |
| 9 | X | Gold | Black | 1-1827581-3 | 11.6 | | |
| 12 | X | Gold | Black | 1-1827581-4 | 15.1 | | |

Note: All Part Numbers are RoHS compliant.

# D-1500T Junction Box – 3.5mm pin pitch

## Type Chart




| Pos | Color | Key | Receptacle housing | Plating | Panel mount | | Accessories |
|---|---|---|---|---|---|---|---|
| | | | | | Horizontal type | Vertical type | DIN-rail attachmentt |
| 3 | Black | X | 1-1827579-1 | — | — | — | — |
| 10 | Black | — | 1971150-1 | — | — | — | — |
| 34 | Black | — | — | Gold | 1971151-1 | 1971151-2 | 1971182-1* |

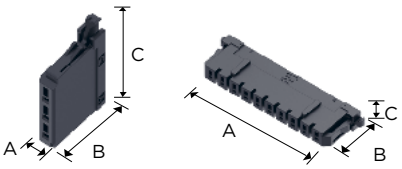
Note: Kit PN 1971190-1 is also available, which includes the junction box 1971151-2, DIN-rail mounting feet 1971182-1 and 2 screws.
* 4 screws are needed for attaching connector into place

## Relative Product Information

Applicable contact ...P.21
Performance & Specifications ...P.19

## External Dimensions

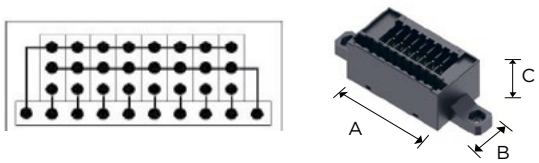
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1827579-1 | 3.3 | 11.3 | 16.4 |
| 10 | — | Black | 1971150-1 | 42.2 | | 4.6 |

- Tab Housing

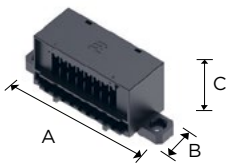
Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 34 | — | Gold | Black | 1971151-2 | 64.8 | 22.8 | 18.2 |

- Panel Mount

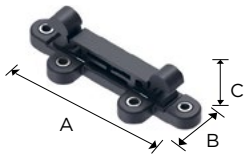
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 34 | — | Gold | Black | 1971151-1 | 57.7 | 18.7 | 24.6 |

- Accessories

Pins to be mounted with a foot attachment

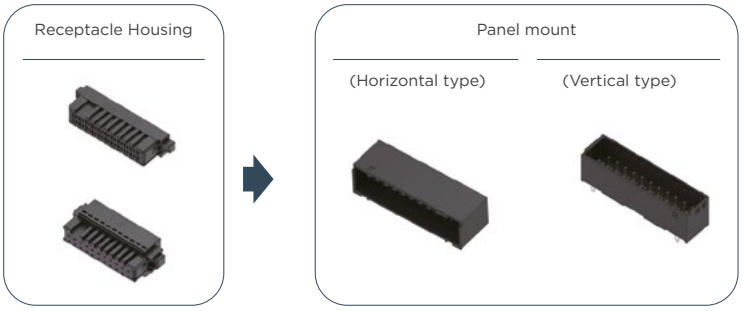



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| — | — | Black | 1971182-1 | 67.5 | 19.0 | 18.1 |

Note: All Part Numbers are RoHS compliant.

# D-1900D Double-row Spring Clamp Type – 3.5mm pin pitch

## Type Chart



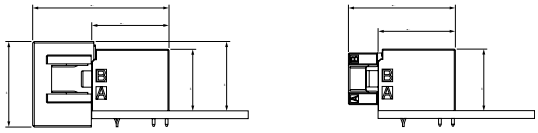

| Pos | Color | Key | Receptacle housing | Plating | Panel mount | | Accessories |
|---|---|---|---|---|---|---|---|
| | | | | | Horizontal type | Vertical type | DIN-rail attachmentt |
| 3 | Black | X | 1-1827579-1 | — | — | — | — |
| 10 | Black | — | 1971150-1 | — | — | — | — |
| 34 | Black | — | — | Gold | 1971151-1 | 1971151-2 | 1971182-1* |

Note: Kit PN 1971190-1 is also available, which includes the junction box 1971151-2, DIN-rail mounting feet 1971182-1 and 2 screws.
* 4 screws are needed for attaching connector into place

## Relative Product Information

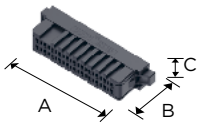
Applicable contact ...P.21
Performance & Specifications ...P.19
Special tool 1891348-1

## Mated Dimension



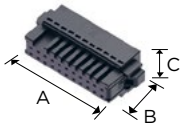
## External Dimensions

- Receptacle Housing (Crimp type)




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 8 | X | Black | 1-1871946-4 | 24.2 | 15.0 | 9.9 |
| 12 | X | Black | 1-1871946-6 | 34.2 | | |
| 16 | X | Black | 1-1871946-8 | 41.2 | | |
| 22 | X | Black | 2-1871946-1 | 51.7 | | |

- Receptacle Assembly (Spring clamp)

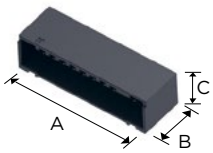



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 8 | X | Gold | Black | 1-1871940-4 | 25.2 | 20.6 | 16.4 |
| 12 | X | Gold | Black | 1-1871940-6 | 32.2 | | |
| 16 | X | Gold | Black | 1-1871940-8 | 39.2 | | |
| 22 | X | Gold | Black | 2-1871940-1 | 49.7 | | |
| 30 | X | Gold | Black | 2-1871940-5 | 63.7 | | |
| 38 | X | Gold | Black | 2-1871940-9 | 77.7 | | |

Note: All Part Numbers are RoHS compliant.

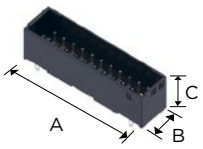
- Board-Mounting Header

Horizontal type



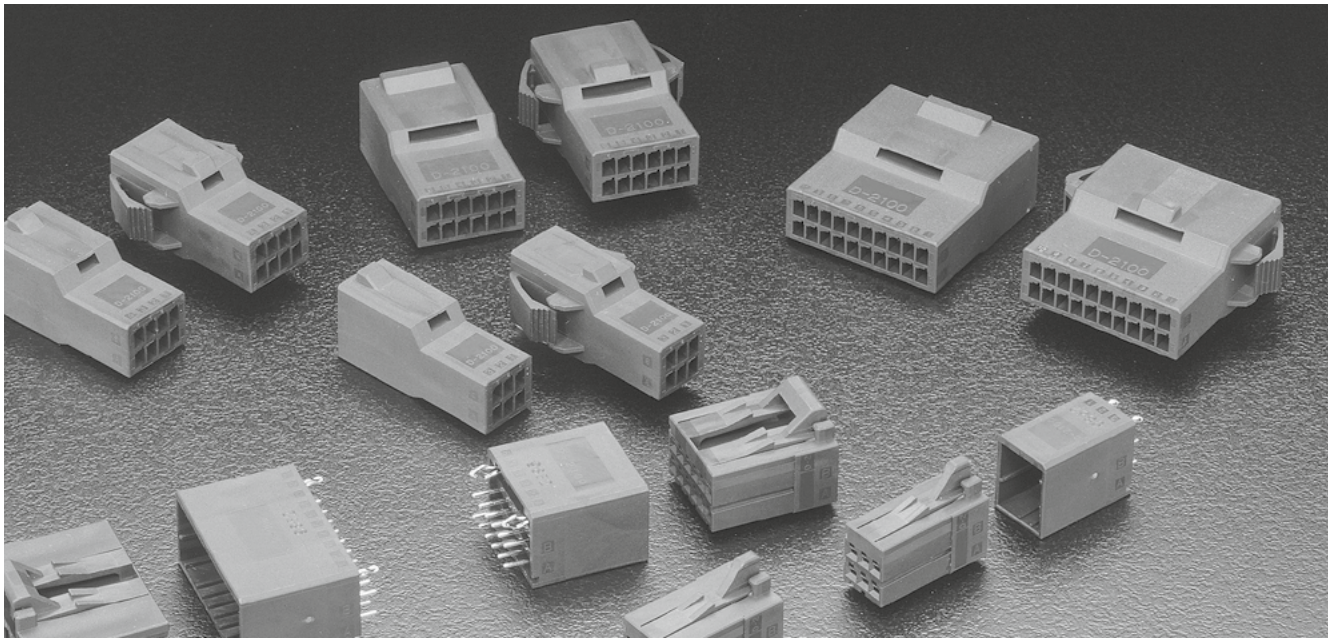

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 8 | X | Gold | Black | 1-1871935-4 | 19.8 | 14.8 | 11.8 |
| 12 | X | Gold | Black | 1-1871935-6 | 26.8 | | |
| 16 | X | Gold | Black | 1-1871935-8 | 33.8 | | |
| 22 | X | Gold | Black | 2-1871935-1 | 44.3 | | |
| 30 | X | Gold | Black | 2-1871955-5 | 58.3 | | |
| 38 | X | Gold | Black | 2-1871935-9 | 72.3 | | |

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 8 | X | Gold | Black | 1-2013325-4 | 20.2 | 11.5 | 12.5 |
| 12 | X | Gold | Black | 1-2013325-6 | 26.8 | | |
| 22 | X | Gold | Black | 2-2013325-1 | 44.3 | | |

# D-2000 Series



## Series Introduction

The D-2000 series is a compact connector in the Dynamic series and has the specifications for industrial machinery. Its proprietary concept, long contact wiping length, provides the high- reliability which is needed for industrial machinery.

The series also includes the multi-position drawer type not found in any other series. The hybrid type integrates signal and power contacts in a single connector.

## Product Features

**1. Terminal and Housing Construction are Twist Resistant**
The box shape receptacle contact is highly resistant to twisting and the housing slit also prevents angled mating to increase reliability.

**2. Contact Wiping Length**
Attaining the reliability needed for industrial machinery in a compact size by using a long contact wiping length.

**3. Wire Sizes:**
With its 2.5 mm pitch, it is a compact series, yet it can use 18 AWG wires, which are often used in industrial equipment.

**4. Audible Latching**
Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (halfmating), even if the connection cannot be seen. mating) even in an operating environment where visual inspection is not possible.

**5. Keying**
The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating. It is also possible to make more key patterns by using keying plugs.

**6. Center Locking**
This is the first application of a center lock in Dynamic series. On-board space requirements can be minimized because these connectors can be mounted in a tight space for high- density mounting on boards requiring signal lines.

**7. Drawer Type**
The drawer type connector was developed with a floating construction on one side for applications where it is not possible to see the connection. There can be up to 50 positions, the highest in the series. These connectors make it possible to make connections between units with flexibility.

**8. Hybrid Type**
The D-2600 series combines signal and power contacts in a single connector by using D-2000 contacts as signal contacts and D-3000 contacts as power ones. This saves on-board space and improves maintenance.

# D-2000 Series Performance and Specifications

## Performance

| Item | 2100S/D | 2100M | 2600D |
|---|---|---|---|
| Pitch | 2.5mm | | |
| Rated Current: | 5A max | 2.6A max | 3.2A max |
| Rated Voltage | 250V AC/DC | | |
| Dielectric Withstanding Voltage | 1500V AC | 2300V AC | 1500V AC |
| Total resistance | 5mΩ max (initial) 10mΩ max (lifetime) | | |
| Insertion strength | 4.9N max (per pole) | | |
| Withdrawal strength | 0.29N min (per pole) | | |
| Durability | 500 cycles | | |
| Lock strength | 39.2N min | — | 98N min |

## Positions / Wire size / Rated current

D-2100S/D value

| Position | Wire Size | | | | | |
|---|---|---|---|---|---|---|
| | AWG 18 | AWG 20 | AWG 22 | AWG 24 | AWG 26 | AWG 28 |
| 3 | 5 | 4.5 | 4.3 | 3.3 | 2.9 | 2.3 |
| 6 | 5 | 4.2 | 4 | 2.7 | 2.5 | 2 |
| 8 | 4.5 | 4 | 3.5 | 2.5 | 2.2 | 1.8 |
| 12 | 4 | 3.5 | 3 | 2.3 | 1.9 | 1.5 |
| 16 | 3.2 | 2.8 | 2.4 | 2 | 1.6 | 1.2 |
| 20 | 3.2 | 2.8 | 2.4 | 2 | 1.6 | 1.2 |

## Product Specification

| Series Name | D-2100S/D | D-2100M | D-2600D |
|---|---|---|---|
| Product Specifications | 108-5619 | 108-5659 | 108-78301 |
| Applications Specifications | 114-5258 | | |
| Instruction sheet (hand tool) | 408-10414 (S) | | |
| | 408-8547-1(M) | | |
| Instruction sheet (extraction tool PN) | (1276716-1)411-5900 | | |

Please refer to the standards on P. 43 for the D-3000 contact used in D-2600D
Please refer to the manual when using the product. An e-Catalogue is also available for download from the Internet.

## Materials and Plating

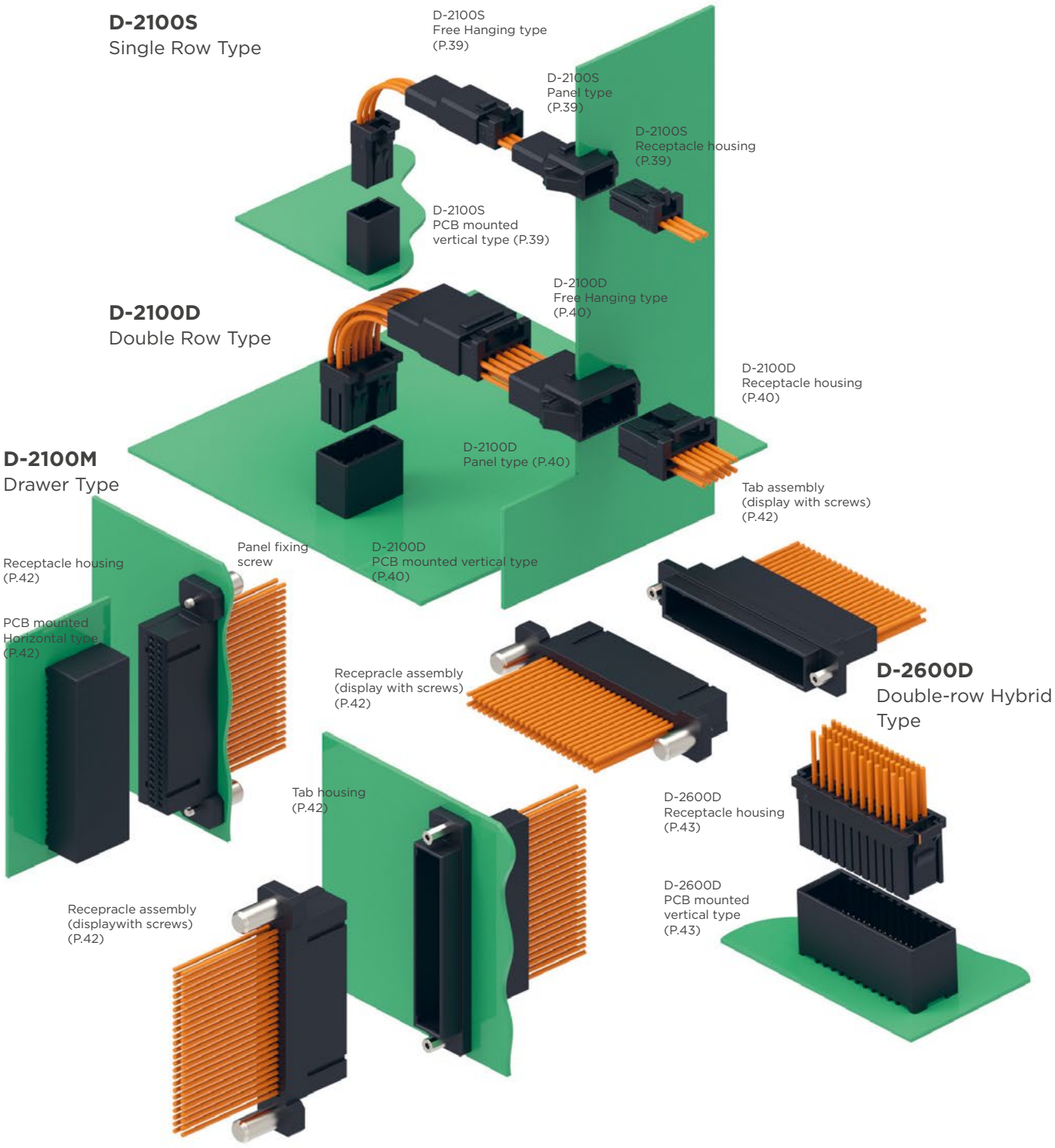
| Category | Material | Plating |
|---|---|---|
| Receptacle Contact<br>Tab Contact | Copper alloys | 0.38 µm Gold plating over nickel underplate |
| Board mount Header | Copper alloys | 0.38 µm Gold plating over nickel underplate<br>Tin plating on tail side |
| Housing | UL94-V-0, thermoplastic PBT with glass fiber | |

## Safety Standards

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

| series / Standards | D-2100 series | | | D-2100M Drawer Type | | |
|---|---|---|---|---|---|---|
| | Rated Voltage | Rated Current | Temperature Range | Rated Voltage | Rated Current | Temperature Range |
| Product Specifications 108-5619 (general)108-5659 (drawer type) | 250V AC/DC | 5A (unipolar) | -55°C ~+105°C | 250V AC/DC | 2.6A AWG#20 hours 50 pole load | -5°C ~+105°C |
| ULFile No.E28476 | Determined according to the requirements ofapplication | Determined according to the requirements ofapplication | — | Determined according to the requirements ofapplication | Determined according to the requirements ofapplication | — |
| CSAReport No. LR 7189 | 250V AC/DC | AWG#24-#28: 3.3A AWG#18-#22: 5A | — | 250V AC/DC | Max 5A per pole | — |
| TÜVLicense No. R 9950679 | 125V AC/DC | 5A | -55°C ~+105°C | 125V AC/DC | Max 5A per pole | -5°C ~+105°C |

# D-2000 Series Configurations



# D-2000 Series Contact

## Crimped type
(gold plating thicknes 0.38 µm )



Receptacle Contact
(used in receptacle housing)



Tab contact
(used in tab housing)

| Wire Range | | Outside Diameter of Insula-tion mm | Wire Range Mark | Contact part number | | | | Models of applicable tools | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptacle Contact | | Tab Contact | | Hand Tools | Tool numbers |
| AWG | $mm^2$ | | | Strip form | Loose Piece | Strip form | Loose Piece | | |
| 28 | 0.09 | 0.88-1.3 | S | 1318106-1 | 1318108-1 | 1318110-1 | 1318112-1 | 91576-1 | 2151240-1 |
| 26 | 0.12 | | | | | | | | |
| 24 | 0.20 | 1.11-1.43 | | | | | | | |
| 24 | 0.20 | 2.2-2.25 | S1 | 1-1318106-1* | — | 1-1318110-1* | — | — | — |
| 22 | 0.30 | 1.26-1.8 | M | 1318105-1 | 1318107-1 | 1318109-1 | 1318111-1 | 91595-1 | 2151071-1 |
| 20 | 0.50 | | | | | | | | |
| 18 | 0.85 | 1.79-1.9 | | | | | | | |

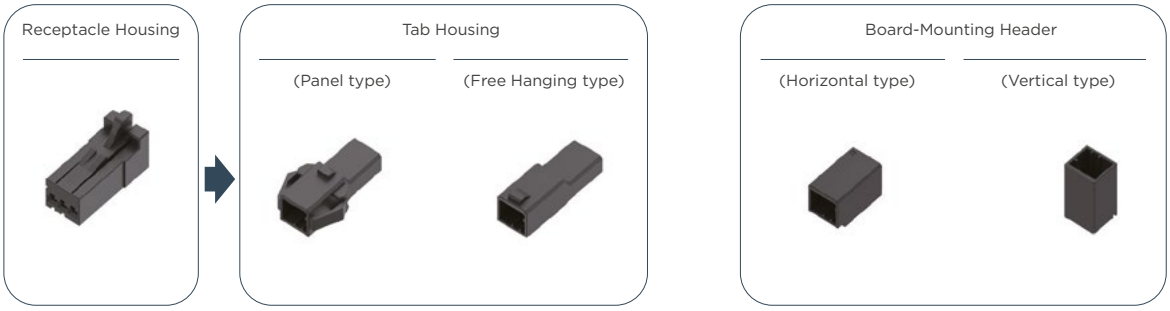
***This terminal is only applicable to the UL1051 cable.**
Note: When placing your order, please check with the confirmed sales leadtime. Please contact our sales department or distributor for more information.
Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.
Tin plating contact will be available in June.2024

The receptacle contact can be used in all receptacle housings, the Tab housing can be used in all tab housings.
Details of the applicable tools are available from P.120-124

NOTE: All products are RoHS compliant On selection.

# D-2100S Single-row Standard Type – 2.5mm pin pitch

## Type Chart



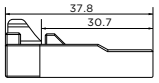

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 3 | Black | X | 1-1318120-3 | 1-1318116-3 | 1-1318117-3 | Gold | 1376135-1 | 1318123-1 |
| | Black | Y | 2-1318120-3 | 2-1318116-3 | 2-1318117-3 | Gold | 1376135-2 | 1318123-2 |
| | Black | Z | 3-1318120-3 | — | — | Gold | 1376135-3 | — |
| | Black | X | 1-1473074-3* | — | — | Gold | — | 1-1318123-1** |

NOTE: The * mark means drawer typer
**Sequential

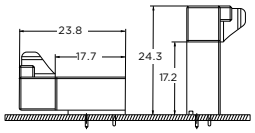
## Relative Product Information

Application contact...P.38
Performance & Specifications...P.36

## Mated Dimension



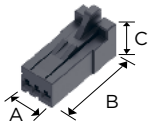

Panel /Free Hanging type




Horizontal type Vertical type

## External Dimensions

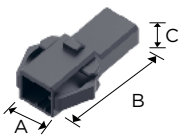
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1318120-3 | 8.9 | 20.0 | 12.0 |
| | Y | Black | 2-1318120-3 | | | |
| | Z | Black | 3-1318120-3 | | | |
| | X | Black | 1-1473074-3 | 8.9 | 20.0 | 11.8 |

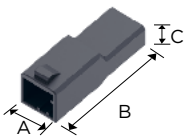
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1318116-3 | 19.7 | 30.7 | 9.5 |
| | Y | Black | 2-1318116-3 | | | |

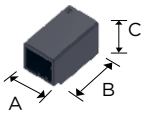
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1318117-3 | 10.2 | 30.7 | 9.5 |
| | Y | Black | 2-1318117-3 | | | |

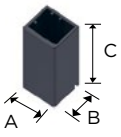
- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1376135-1 | 10.2 | 17.7 | 11.0 |
| | Y | Gold | Black | 1376135-2 | | | |
| | Z | Gold | Black | 1376135-3 | | | |

Vertical type



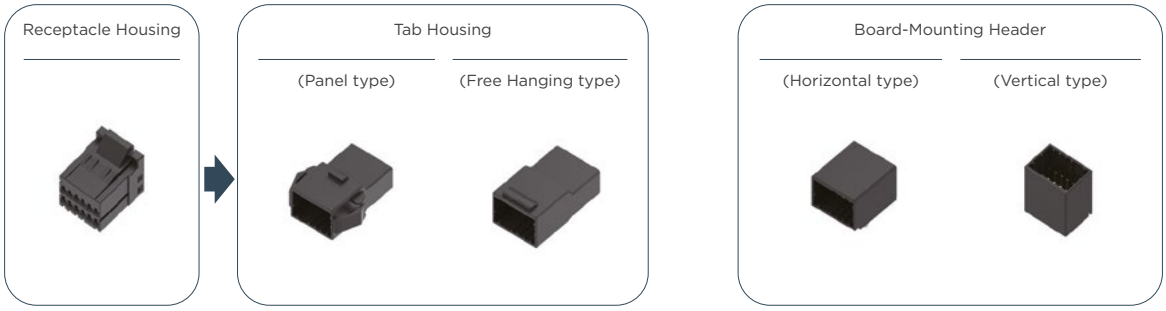

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1318123-1 | 10.2 | 9.5 | 17.8 |
| | | Gold | Black | 1-1318123-1** | | | |
| | Y | Gold | Black | 1318123-2 | | | |

**Sequential

NOTE: All products are RoHS compliant On selection.

# D-2100D Double-row Standard Type – 2.5mm pin pitch

## Type Chart



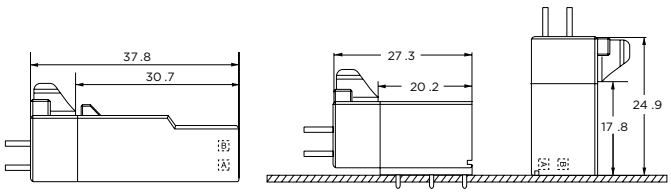

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 6 | Black | X | 1-1318119-3 | 1-1318114-3 | 1-1318115-3 | Gold | 1376136-1 | 1318124-1 |
| | Black | Y | 2-1318119-3 | 2-1318114-3 | 2-1318115-3 | Gold | 1376136-2 | 1318124-2 |
| 8 | Black | X | 1-1318119-4 | 1-1318114-4 | 1-1318115-4 | Gold | 1376009-1 | 1318125-1 |
| | Black | | | | | Gold | 1-1376009-1* | 1-1318125-1* |
| | Black | Y | 2-1318119-4 | 2-1318114-4 | 2-1318115-4 | Gold | 1376009-2 | 1318125-2 |
| | Black | | | | | Gold | | 1-1318125-2* |
| 12 | Black | X | 1-1318118-6 | 1-1318114-6 | 1-1318115-6 | Gold | 1376020-1 | 1318126-1 |
| | Black | | | | | Gold | | 1-1318126-1* |
| | Black | Y | 2-1318118-6 | 2-1318114-6 | — | Gold | 1376020-2 | 1318126-2 |
| | Black | | | | | Gold | | 1-1318126-2* |
| | Black | Z | 3-1318118-6 | — | — | Gold | — | 1318126-3 |
| 16 | Black | X | 1-1318118-8 | — | — | Gold | — | 1747994-1 |
| | Black | Y | 2-1318118-8 | — | — | Gold | — | 1747994-2 |
| 20 | Black | X | 1-1318118-9 | 1-1318114-9 | 1-1318115-9 | Gold | 1376137-1 | 1318127-1 |
| | Black | Y | 2-1318118-9 | 2-1318114-9 | 2-1318115-9 | Gold | 1376137-2 | 1318127-2 |

Note: There is Z-key option in 20-position product, please contact TE sales representative for more information
*Sequential

## Relative Product Information

Application contact...P.38
Performance & Specifications...P.36

## Mated Dimension



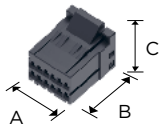

Panel /Free Hanging type  Horizontal type  Vertical type

NOTE: All products are RoHS compliant On selection.

# D-2100D Double-row Standard Type – 2.5mm pin pitch

## External Dimensions

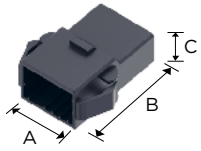
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 1-1318119-3 | 8.3 | 20.0 | 15.8 |
| | Y | Black | 2-1318119-3 | | | |
| 8 | X | Black | 1-1318119-4 | 10.8 | 20.0 | 15.8 |
| | Y | Black | 2-1318119-4 | | | |
| 12 | X | Black | 1-1318118-6 | 15.8 | 20.0 | 14.8 |
| | Y | Black | 2-1318118-6 | | | |
| | Z | Black | 3-1318118-6 | | | |
| 16 | X | Black | 1-1318118-8 | 20.8 | 20.0 | 14.8 |
| | Y | Black | 2-1318118-8 | | | |
| 20 | X | Black | 1-1318118-9 | 25.8 | 20.0 | 14.8 |
| | Y | Black | 2-1318118-9 | | | |

- Tab Housing

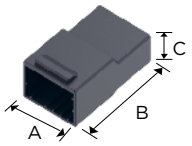
Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 1-1318114-3 | 19.7 | 30.7 | 13.2 |
| | Y | Black | 2-1318114-3 | | | |
| 8 | X | Black | 1-1318114-4 | 22.2 | 30.7 | 13.2 |
| | Y | Black | 2-1318114-4 | | | |
| 12 | X | Black | 1-1318114-6 | 27.2 | 30.7 | 13.2 |
| | Y | Black | 2-1318114-6 | | | |
| 20 | X | Black | 1-1318114-9 | 37.2 | 30.7 | 13.2 |
| | Y | Black | 2-1318114-9 | | | |

- Tab Housing

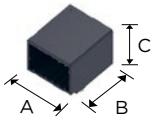
Free Hanging type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | X | Gold | Black | 1-1318115-3 | 10.2 | 30.7 | 10.7 |
| | Y | Gold | Black | 2-1318115-3 | | | |
| 8 | X | Gold | Black | 1-1318115-4 | 12.7 | 30.7 | 10.7 |
| | Y | Gold | Black | 2-1318115-4 | | | |
| 12 | X | Gold | Black | 1-1318115-6 | 17.7 | 30.7 | 10.7 |
| 20 | X | Gold | Black | 1-1318115-9 | 27.7 | 30.7 | 10.7 |
| | Y | Gold | Black | 2-1318115-9 | | | |

- Board-Mounting Header

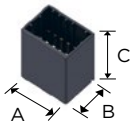
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | X | Gold | Black | 1376136-1 | 10.2 | 20.2 | 14.7 |
| | Y | Gold | Black | 1376136-2 | | | |
| 8 | X | Gold | Black | 1376009-11-1376009-1* | 12.7 | 20.2 | 14.7 |
| | Y | Gold | Black | 1376009-2 | | | |
| 12 | X | Gold | Black | 1376020-1 | 17.7 | 20.2 | 14.7 |
| | Y | Gold | Black | 1376020-2 | | | |
| 20 | X | Gold | Black | 1376137-1 | 27.7 | 20.2 | 14.7 |
| | Y | Gold | Black | 1376137-2 | | | |

*Sequential

Vertical type



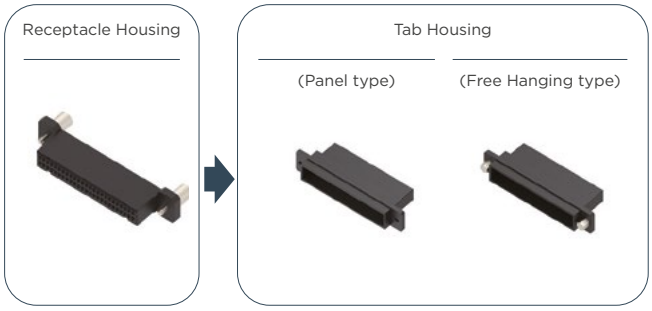

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | X | Gold | Black | 1318124-1 | 10.2 | 13.2 | 17.8 |
| | Y | Gold | Black | 1318124-2 | | | |
| 8 | X | Gold | Black | 1318125-11-1318125-1* | 12.7 | 13.2 | 17.8 |
| | Y | Gold | Black | 1318125-21-1318125-2* | | | |
| 12 | X | Gold | Black | 1318126-11-1318126-1* | 17.7 | 13.2 | 17.8 |
| | Y | Gold | Black | 1318126-21-1318126-2* | | | |
| | Z | Gold | Black | 1318126-3 | | | |
| 16 | X | Gold | Black | 1747994-1 | 22.7 | 13.2 | 17.8 |
| | Y | Gold | Black | 1747994-2 | | | |
| 20 | X | Gold | Black | 1318127-1 | 27.7 | 13.2 | 17.8 |
| | Y | Gold | Black | 1318127-2 | | | |

*Sequential

NOTE: All products are RoHS compliant On selection.

# D-2100M Double-row Standard Multipostion Type (Drawer) – 2.5mm pin pitch

## Type Chart

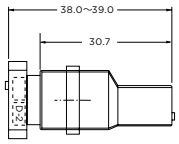



| Pos | Color | Key | Receptacle housing | | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Type | Part Number | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 50 | Black | — | Drawer | 1318577-1 | 1318578-11318578-2 (with nuts) | — | Gold | — | — |
| | Black | | Threaded rawer | 1376072-2 | — | 1376073-2 | — | — | — |

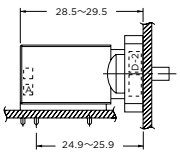
## Relative Product Information

Application contact...P.38
Performance & Specifications...P.36
Accessories ...P.126

## Mated Dimension



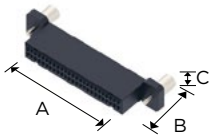

Panel /Free Hanging type




Horizontal type

## External Dimensions

- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 50 | — | Black | 1318577-1 | 88.5 | 20.0 | 16.6 |
| | | | 1376072-2* | | 32.0 | |

*The product contains a receptacle housing 1318577-2 and two screws 1376058-1

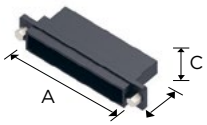
- Tab Housing

Panel type

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 50 | — | Black | 1318578-1 | 86.1 | 30.7 | 15.9 |
| | | | 1318578-2(with nuts) | | | |

- Receptacle Assembly (with screws)

Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 50 | — | Black | 1376073-2 | 86.1 | 30.7 | 15.9 |

NOTE: All products are RoHS compliant On selection.

# D-2600D Double-row Hybrid Type – pin pitch, 2.5mm (D-2), 3.81mm (D-3)

## Type Chart

Receptacle Housing



Board-Mounting Header

(Vertical type)



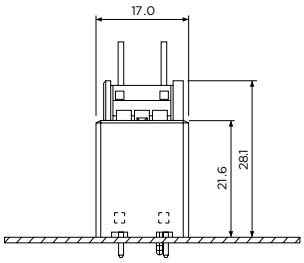
| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 48* | Black | — | 1827540-1 | — | — | Gold | — | 1827538-1 |

*36 D-2000 contacts and 12 D-3000 contacts are used in combination

## Relative Product Information

Applicable contact...P.38,48
Performance & Specifications ...P.36,45

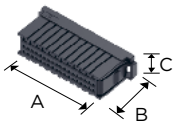
## Mated Dimension




Vertical type

## External Dimensions

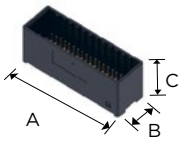
- Receptacle Housing




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 48 | — | — | Black | 1827540-1 | 58.7 | 22.8 | 15.8 |

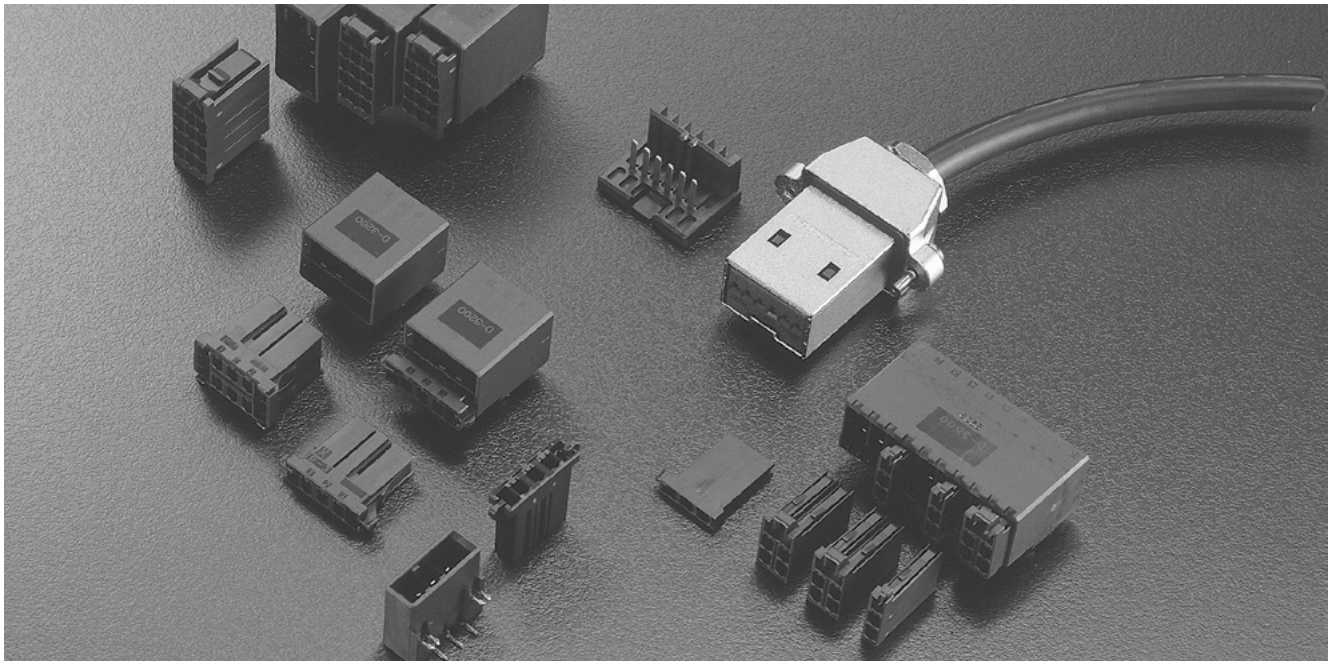
- Board-Mounting Header

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 48 | — | Gold | Black | 1827538-1 | 55.9 | 18.0 | 21.6 |

# D-3000 Series



## Series introduction

The 3000 series is the main Dynamic Series. They are widely used as industrial ‘signal’ and ‘power’ connectors.

Pin layout comes in two types: 3.81mm pitch (standard) and 5.08mm pitch (high voltage). The standard pitch is used for signal circuits and the high voltage type is used for power circuits.

For power source usage, it meets recent demands for small size and high power which comply with miniaturisation of the machinery. The newly developed copper alloy can carry a higher current of 15A per pole despite its small size.

This concept is based on the development strategy of the Dynamic Series to cover as wide a range of solutions for as many customers as possible. This concept makes the D-3000 series terminals fit all D-3000 housings, and the wide variety of which means that it is not necessary for a customer to look outside of this range for every requirement.

The D-3000 series has been in development for more than a decade since its initial development, gaining momentum through customer input, and is currently being extended further.

## Product Features

**1. Anti-twist contact structure**
An anti-twist contact structure were developed for motor industry which has 3 contact points when mating receptacle contact with tab contact or header. Concept of 3-contact-points provides high reliability in a real-world environment.

**2. Three plating types**
3 Plating types are available to meet the customer’s cost, performance requirements and applications. Under a normal environment with few mating/unmating requirements, tin plating can be used. Where there is a large number of mating/unmating requirements, then gold plating at 0.38 µm thickness shoud be used. If the environment is deleterious then gold plating at 0.76 µm thickness can be selected

**3. Two types of contact pressure options**
2 types of contact pressures are available depending on application: standard Contact pressure for withstanding a large number of mating/unmating requirements or other extreme environments, and high Contact pressure for vibration prone applications

**4. High Current**
Despite its small size, it conducts up to 15A (at a maximum temperature rise of 30°C).
The latest developed copper alloy adds to the reliability of the 3-point contact structure

**5. Audible Latching**
When mating, a dear ’lock’ sound and vibration will be felt by the assembler, that can prevent working ‘blind’ mis-mating (or halfmating) problems

**6. Keying**
The housing provides a keying (slit), hence mis-matings can be prevented by using the X and Y keys separately. At the same time, the keying plug can be used to create new key patterns.

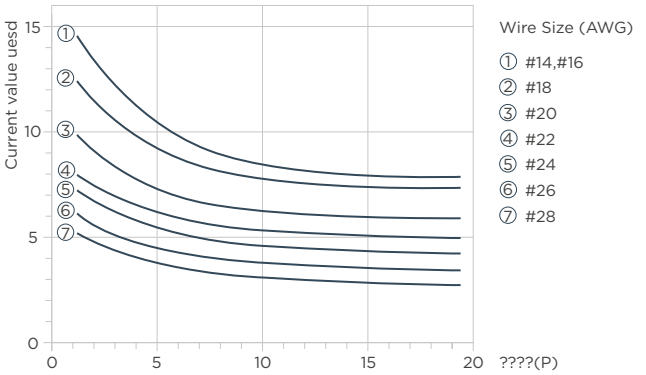
# D-3000 Series Performance and Specifications

## Performance

| Item \ Pitch | 150mil (3.81mm) | 200mil (5.08mm) |
|---|---|---|
| Rated Voltage | 250V AC/DC | 800V AC/DC (Pollution degree I) |
| Rated Current | 1 pole:15A3 pole: 12A6 pole: 9.5A16 pole: 8A(AWG#16 for use as powersource) | |
| Contact resistance | 10mΩ max | |
| Withstanding Voltage | 1,500V AC(1 min) | 2,200V AC(1 min) |
| Temperature | -55~+105°C | |

## Positions/Wire Size/Rated Current

- basic data from qualification test report 501-5013
- temperature rise of 30C




## Performance & Specificatios

| | |
|---|---|
| Product Specifications | 108-5349 |
| Test Report | 501-5013501-78668 FMLB |
| Applications Specifications | 114-5148114-78030 FMLB |
| Pull tool product number(234168-1) manual | 411-5726 |

| Hand tool manual | |
|---|---|
| Tool product number | Instruction No. |
| 91565-1<br>91559-1<br>91558-1<br>91560-1<br>91561-1 | 408-8547-1 |

Refer to instruction manuals for usage information.
An E-Catalogue is also available for download from the internet

## Material and Plating

| Category | Materials | Plating |
|---|---|---|
| Receptacle Contact<br>Tab Contact | Copper alloys | Tin-plating or gold-plating over Nickel under-plated |
| Board Mount Header | Copper alloys | Tin-plating or gold-plating over Nickel under-plated |
| Housing | UL94V-0 thermoplastic PBT with glass fiber, PPS (SMT type), Black | |

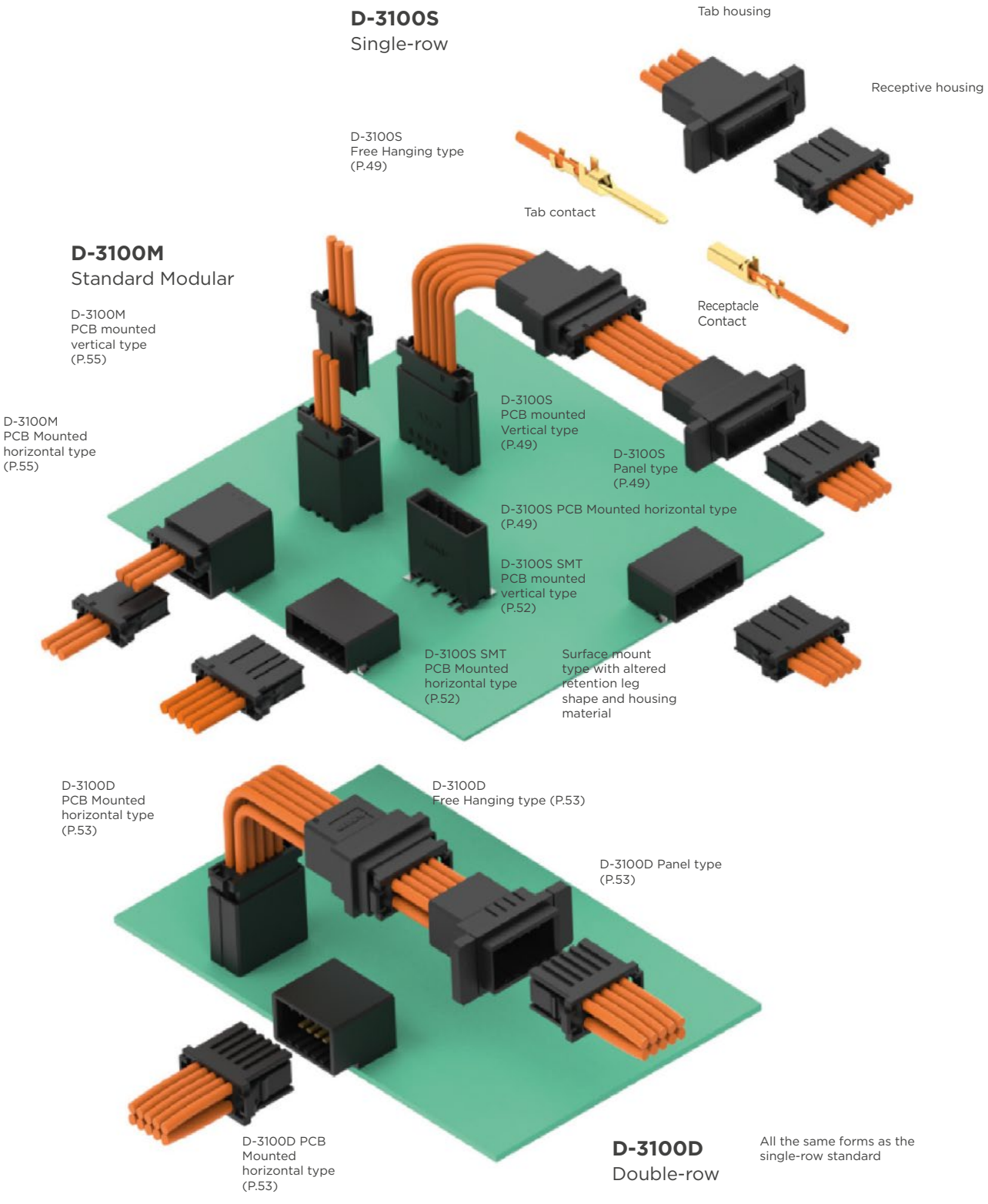
## Safety Standards

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

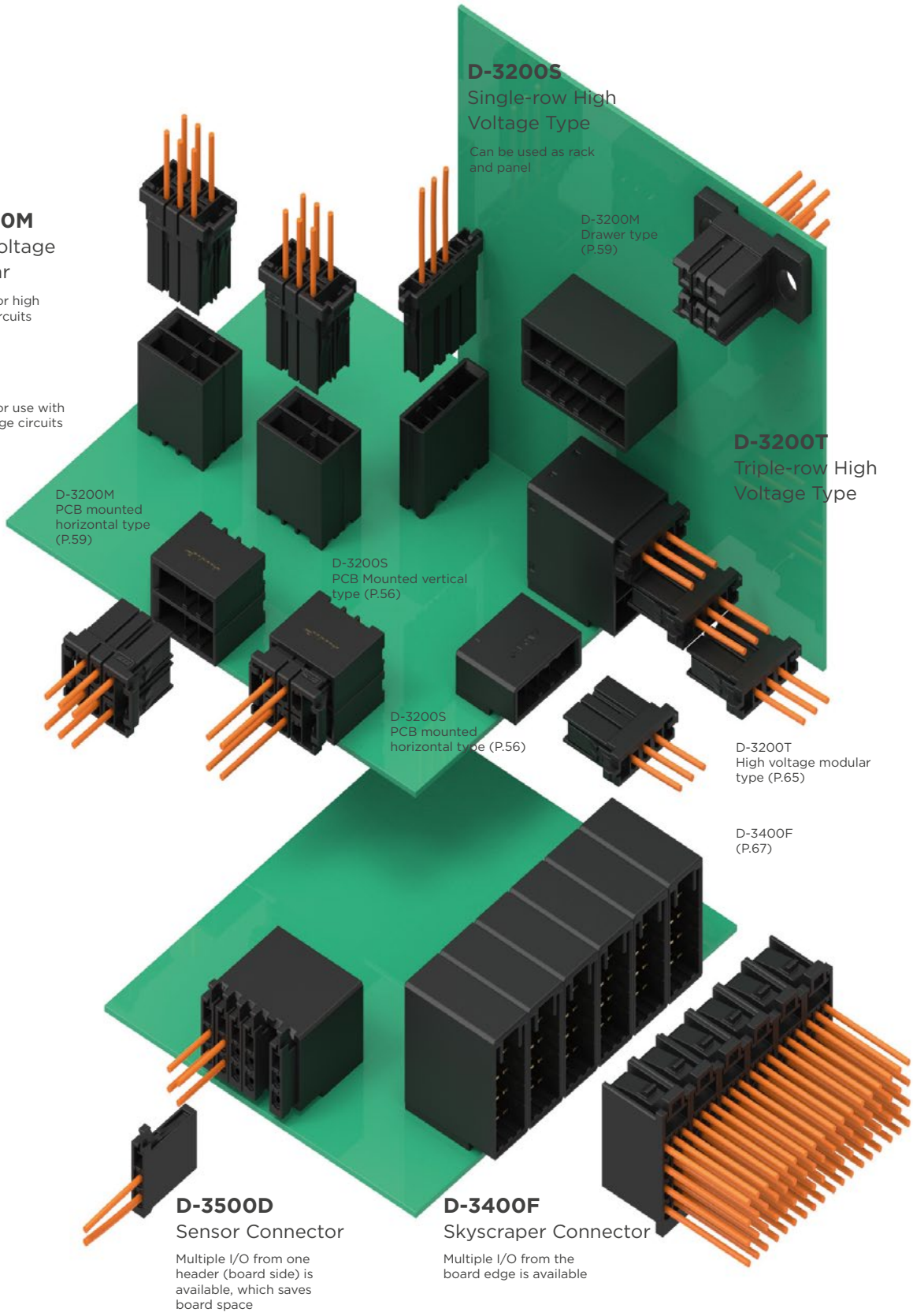
| Series \ STD. | D-3100 and D-3400 series (3.81mm pitch) | | | D-3200 and D-3500 series (5.08mm pitch) | | |
|---|---|---|---|---|---|---|
| | Rated Voltage | Rated Current | Temperature Range | Rated Voltage | Rated Current | Temperature Range |
| Product Specifications 108-5349 | 250V AC/DC | Above table | -55°C ~+105°C | 800V AC/DC(overvol-tage type I, Pollution degree I) | Above table | -55°C ~+105°C |
| ULFile No.E28476 (Reco-gnized Component) | Based on the require-ments of Application | Based on the require-ments of Application | — | Based on the require-ments of Application | Based on the require-ments of Application | — |
| CSAReport No. LR7189 | 250V AC/DC | 8A max | — | 250V AC/DC | 8A max | — |
| TÜV License No. R9151488 (EN61984)IP prot ection level IP-00 Overvoltage type (II) | 250V AC/DC | AWG / A<br>28 / 2<br>26 / 3<br>24 / 3<br>22 / 4<br>20 / 5<br>18 / 6<br>16 / 8<br>14 / 8 | -55°C ~+105°C | 400V AC | AWG / A<br>28 / 2<br>26 / 3<br>24 / 3<br>22 / 4<br>20 / 5<br>18 / 6<br>16 / 8<br>14 / 8 | -55°C ~+105°C |
| Same as above Overvol-tage type (III) | 150V AC/DC | Same as above | Same as above | 300V AC/DC | Same as above | Same as above |

# D-3000 Series Configurations

All connector forms are provided, from the wire-to-wire panel type and free hanging type to the wire-to-board horizontal type and vertical type. Each position can carry a maximun current of up to 15A.



# D-3000 Series Configurations



# D-3000 Series Contact

## Crimped type



Receptacle Contact
(used in receptacle housing)



Tab contact
(used in tab housing)

| Wire Range | | Outside Diameter of Insulation mm | Wire Range Mark | Contacts | | | | | Applicable tools | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptacle Contact | | | Tab Contact | | | |
| AWG | mm² | | | | Strip form | Loose Piece | Strip form | Loose Piece | CCII Hand Tool PEW12 Hand Tool* (PEW12 dice only) | Mini Applicator |
| 2826<br>0.08<br>0.12 | | 0.8-1.2 | S | Standard contact pressure(gold plating only) | 175194-Δ<br>2298107-1** | 175216-Δ<br>2311162-1** | 175284-Δ | 175287-Δ | 91565-1 | 2836130-1 |
| 24 | 0.20 | 1.0-1.4 | | High contact pressure | 1-175194-Δ | 1-175216-Δ | | | | |
| 24 | 0.20 | 1.2-1.6 | M | Standard contact pressure(gold plating only) | 175195-Δ<br>2298107-2** | 175217-Δ<br>2311162-2**<br>FMLB | 175285-Δ | 175288-Δ | 91559-1 | 2151080-1 |
| 2220 | 0.30<br>0.50 | 1.7-2.6<br>(1.7-2.35)** | | High contact pressure | 1-175195-Δ | 1-175217-Δ | | | | |
| 2018 | 0.50<br>0.85 | 1.8-2.8 | L | Standard contact pressure(gold plating only) | 175196-Δ<br>2298107-3** | 175218-Δ<br>2311162-3** | 175286-Δ | 175289-Δ | 91558-1 | 2151018-1 |
| 16 | 1.25 | 2.2-2.8<br>(2.2-2.56)** | | High contact pressure | 1-175196-Δ | 1-175218-Δ | | | | |
| 16 | 1.25 | 2.2-2.8 | 2L | Standard contact pressure(gold plating only) | 917484-Δ<br>2298107-4** | 917511-Δ<br>2311162-4** | 917485-Δ | 917512-Δ | 91560-1 | 2151119-1 |
| 14 | 2.20 | | | High contact pressure | 1-917484-Δ | 1-917511-Δ | | | | |
| 16 | 1.25 | 3.1-3.3 | 3L | Standard contact pressure(gold plating only) | 353715-Δ<br>2298107-5** | 353717-Δ<br>2311162-5** | 353716-Δ | 353718-Δ | 91561-1 | 2151073-1 |
| 14 | 2.20 | 3.3-3.8 | | High contact pressure | 1-353715-Δ | 1-353717-Δ | | | | |

Reference: Plating code
- 2: 0.38 µm thickness gold plating
- 3: 0.76 µm thickness gold plating
- 5: Tin plating (only set to the high contact pressure type)
- When placing your order, please check with sales for confirmed lead-times.
- Please consult the sales department for micro-application tools

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

* The outer diameter of the insulation is applicable to Losse Piece terminals.For strip form, see notes 114-5148

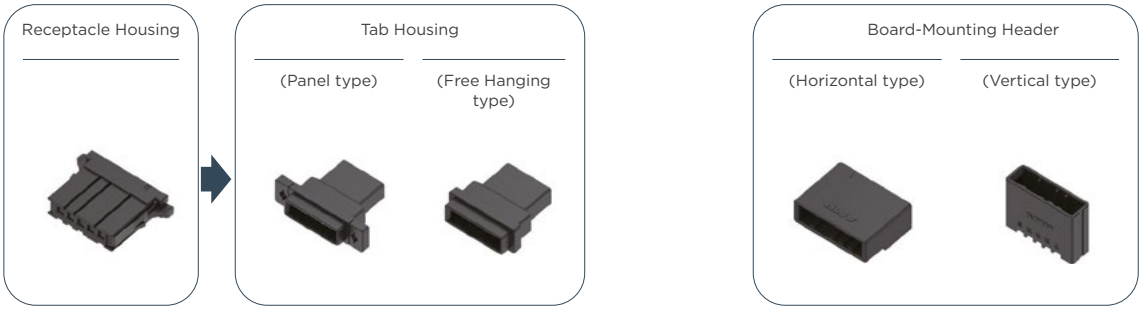
**Sequential (FMLB) female contacts. See 114-78030 in the operating manual.

The receptacle contact can be used in all receptacle housings, while the Tab housing can be used in all tabs housings
Details of the applicable tool are available from P.120-124

NOTE: all products are RoHS compliant On selection.

# D-3100S Single-row Standard – 3.81mm pin pitch

## Type Chart

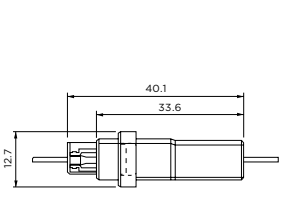



| Pos | Color | Key | Receptacle housing | Tab housing | | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | L Bracket | | Horizontal type | Vertical type |
| 3 | Black | X | 1-178288-3 | 1-178802-3 | 1-177648-3 | S | Gold | 1-178293-2 | 1-178313-2 |
| | Black | | | | | | Gold | 1-178293-3 | 1-178313-3 |
| | Black | | | | | | Tin | 1-178293-5 | 1-178313-5 |
| | Black | Y | 2-178288-3 | 2-178802-3 | 2-177648-3 | S | Gold | 2-178293-2 | 2-178313-2 |
| | Black | | | | | | Gold | 2-178293-3 | 2-178313-3 |
| | Black | | | | | | Tin | 2-178293-5 | 2-178313-5 |
| 4 | Black | X | 1-178288-4 | — | — | — | Gold | 1-178294-2 | 1-178314-2 |
| | Black | | | | | | Gold | 1-178294-3 | 1-178314-3 |
| | Black | | | | | | Tin | 1-178294-5 | 1-178314-5 |
| | Black | Y | 2-178288-4 | — | — | — | Gold | 2-178294-2 | 2-178314-2 |
| | Black | | | | | | Gold | 2-178294-3 | 2-178314-3 |
| | Black | | | | | | Tin | — | 2-178314-5 |
| 5 | Black | X | 1-178288-5 | 1-178802-5 | 1-177648-5 | L | Gold | 1-178295-2 | 1-178315-2 |
| | Black | | | | | | Gold | 1-178295-3 | 1-178315-3 |
| | Black | | | | | | Tin | 1-178295-5 | 1-178315-5 |
| 6 | Black | X | 1-178288-6 | — | — | — | Gold | 1-178296-2 | 1-178316-2 |
| | Black | | | | | | Gold | 1-178296-3 | 1-178316-3 |
| | Black | | | | | | Tin | 1-178296-5 | 1-178316-5 |
| | Black | Y | 2-178288-6 | — | — | — | Gold | 2-178296-2 | 2-178316-2 |
| | Black | | | | | | Gold | — | 2-178316-3 |
| | Black | | | | | | Tin | — | 2-178316-5 |
| 8 | Black | X | 1-178288-7 | 1-178802-7 | 1-177648-7 | L | Gold | 1-178297-2 | 1-178317-2 |
| | Black | | | | | | Gold | 1-178297-3 | 1-178317-3 |
| | Black | | | | | | Tin | 1-178297-5 | 1-178317-5 |
| 10 | Black | X | 1-178288-8 | 1-178802-8 | 1-177648-8 | L | Gold | 1-178298-2 | 1-178318-2 |
| | Black | | | | | | Gold | 1-178298-3 | 1-178318-3 |
| | Black | | | | | | Tin | 1-178298-5 | 1-178318-5 |
| | Black | Y | 2-178288-8 | 2-178802-8 | 2-177648-8 | L | Gold | 2-178298-3 | 2-178318-2 |

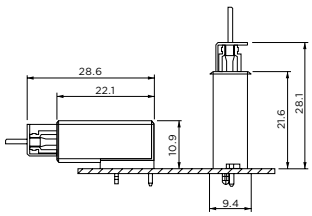
## Relative Product Information

Applicable contact...P.48
Performance & Specifications...P.45
Accessories...P.126

## Mated Dimension




Panel /Free Hanging type



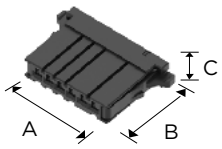

Horizontal /Vertical type

NOTE: All products are RoHS compliant On selection.

# D-3100S Single-row Standard – 3.81mm pin pitch

## External Dimensions

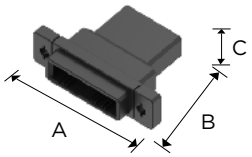
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-178288-3 | 26.8 | 22.8 | 7.2 |
| | Y | Black | 2-178288-3 | | | |
| 4 | X | Black | 1-178288-4 | 30.6 | | |
| | Y | Black | 2-178288-4 | | | |
| 5 | X | Black | 1-178288-5 | 34.4 | | |
| 6 | X | Black | 1-178288-6 | 38.2 | | |
| | Y | Black | 2-178288-6 | | | |
| 8 | X | Black | 1-178288-7 | 45.8 | | |
| 10 | X | Black | 1-178288-8 | 53.4 | | |
| | Y | Black | 2-178288-8 | | | |

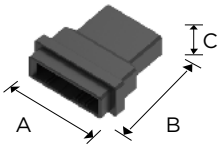
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-178802-3 | 40.0 | 33.6 | 12.7 |
| | Y | Black | 2-178802-3 | | | |
| 5 | X | Black | 1-178802-5 | 47.0 | | |
| 8 | X | Black | 1-178802-7 | 59.0 | | |
| 10 | X | Black | 1-178802-8 | 67.0 | | |
| | Y | Black | 2-178802-8 | | | |

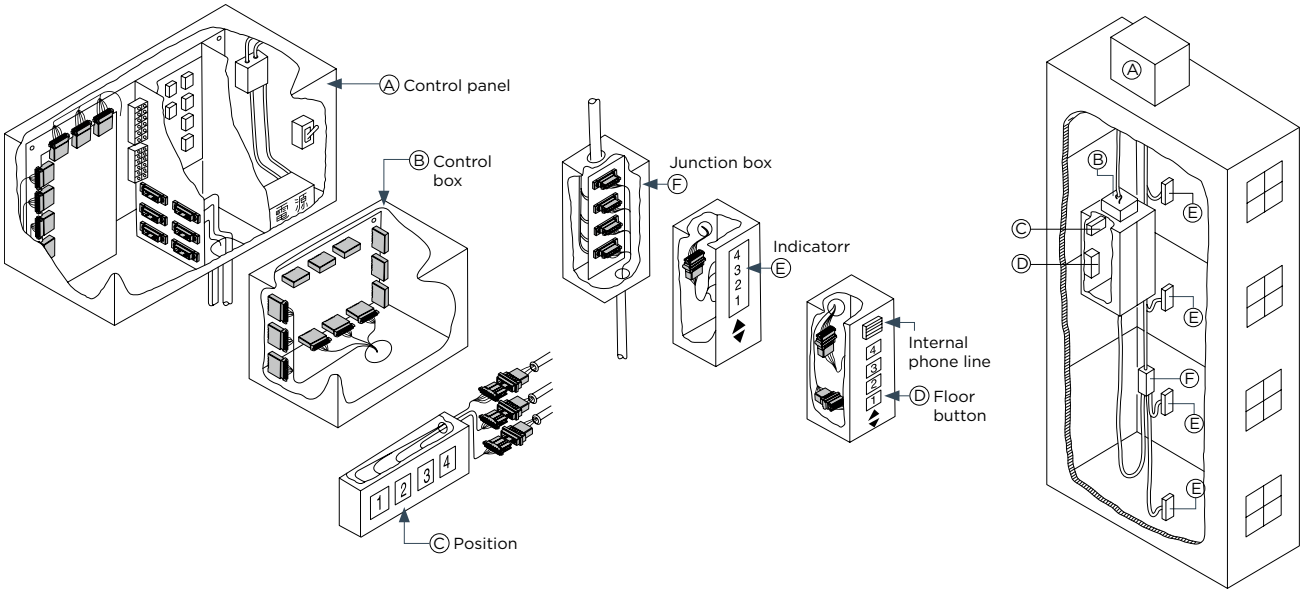
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-177648-3 | 25.6 | 33.6 | 12.7 |
| | Y | Black | 2-177648-3 | | | |
| 5 | X | Black | 1-177648-5 | 33.2 | | |
| 8 | X | Black | 1-177648-7 | 44.6 | | |
| 10 | X | Black | 1-177648-8 | 52.2 | | |
| | Y | Black | 2-177648-8 | | | |

## Applications

Example of elevator applications

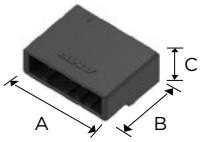



NOTE: All products are RoHS compliant On selection.

# D-3100S Single-row Standard – 3.81mm pin pitch

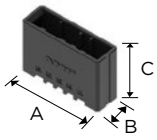
## Board-Mounting Header

Panel type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1-178293-2 | 21.6 | 22.1 | 10.9 |
| | | Gold | Black | 1-178293-3 | | | |
| | | Tin | Black | 1-178293-5 | | | |
| | Y | Gold | Black | 2-178293-2 | | | |
| | | Gold | Black | 2-178293-3 | | | |
| | | Tin | Black | 2-178293-5 | | | |
| 4 | X | Gold | Black | 1-178294-2 | 25.4 | | |
| | | Gold | Black | 1-178294-3 | | | |
| | | Tin | Black | 1-178294-5 | | | |
| | Y | Gold | Black | 2-178294-2 | | | |
| | | Gold | Black | 2-178294-3 | | | |
| 5 | X | Gold | Black | 1-178295-2 | 29.2 | | |
| | | Gold | Black | 1-178295-3 | | | |
| | | Tin | Black | 1-178295-5 | | | |
| 6 | X | Gold | Black | 1-178296-2 | 33.1 | | |
| | | Gold | Black | 1-178296-3 | | | |
| | | Tin | Black | 1-178296-5 | | | |
| | Y | Gold | Black | 2-178296-2 | | | |
| 8 | X | Gold | Black | 1-178297-2 | 40.7 | | |
| | | Gold | Black | 1-178297-3 | | | |
| | | Tin | Black | 1-178297-5 | | | |
| 10 | X | Gold | Black | 1-178298-2 | 48.3 | | |
| | | Gold | Black | 1-178298-3 | | | |
| | | Tin | Black | 1-178298-5 | | | |
| | Y | Gold | Black | 2-178298-3 | | | |

## Board-Mounting Header

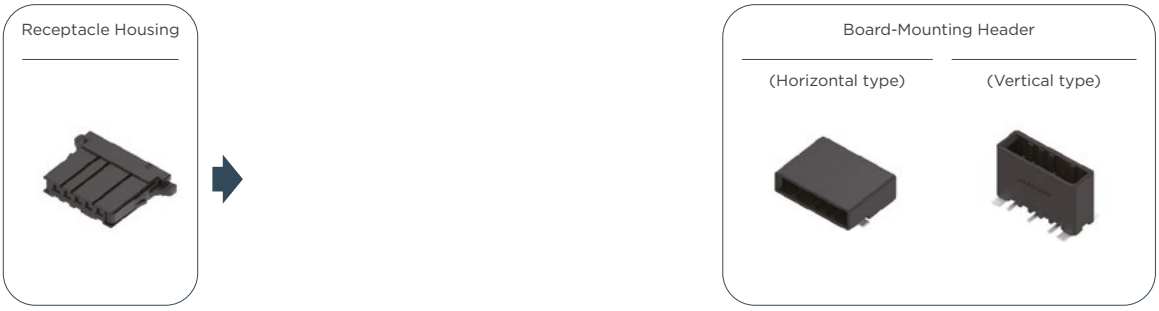



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1-178313-2 | 21.6 | 9.4 | 21.6 |
| | | Gold | Black | 1-178313-3 | | | |
| | | Tin | Black | 1-178313-5 | | | |
| | Y | Gold | Black | 2-178313-2 | | | |
| | | Gold | Black | 2-178313-3 | | | |
| | | Tin | Black | 2-178313-5 | | | |
| 4 | X | Gold | Black | 1-178314-2 | 25.4 | | |
| | | Gold | Black | 1-178314-3 | | | |
| | | Tin | Black | 1-178314-5 | | | |
| | Y | Gold | Black | 2-178314-2 | | | |
| | | Gold | Black | 2-178314-3 | | | |
| | | Tin | Black | 2-178314-5 | | | |
| 5 | X | Gold | Black | 1-178315-2 | 29.2 | | |
| | | Gold | Black | 1-178315-3 | | | |
| | | Tin | Black | 1-178315-5 | | | |
| 6 | X | Gold | Black | 1-178316-2 | 33.1 | | |
| | | Gold | Black | 1-178316-3 | | | |
| | | Tin | Black | 1-178316-5 | | | |
| | Y | Gold | Black | 2-178316-2 | | | |
| | | Gold | Black | 2-178316-3 | | | |
| | | Tin | Black | 2-178316-5 | | | |
| 8 | X | Gold | Black | 1-178317-2 | 40.7 | | |
| | | Gold | Black | 1-178317-3 | | | |
| | | Tin | Black | 1-178317-5 | | | |
| 10 | X | Gold | Black | 1-178318-2 | 48.3 | | |
| | | Gold | Black | 1-178318-3 | | | |
| | | Tin | Black | 1-178318-5 | | | |
| | Y | Gold | Black | 2-178318-2 | | | |

NOTE: All products are RoHS compliant On selection.

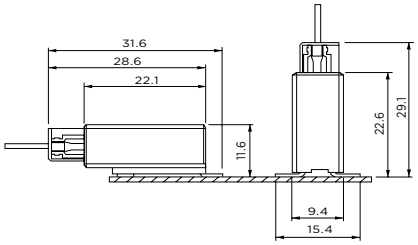
# D-3100S Single-row SMT Types – 3.81mm pin pitch

## Type Chart




| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 5 | Black | X | 1-178288-5 | — | — | Gold | 1-177662-2 | 1-177665-2 |
| 8 | Black | | 1-178288-7 | — | — | Gold | 1-179188-2 | — |
| | Black | | | — | — | Gold | 1-179188-3 | |

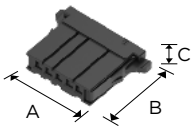
## Mated Dimension




Free Hanging type

## External Dimensions

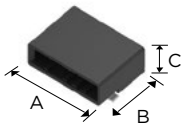
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 5 | X | Black | 1-178288-5 | 34.4 | 22.8 | 7.2 |
| 8 | | | 1-178288-7 | 45.8 | | |

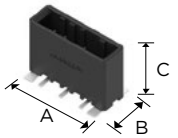
- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 5 | X | Gold | Black | 1-177662-2 | 29.2 | 22.1 | 11.6 |
| 8 | X | Gold | Black | 1-179188-2 | 40.7 | | |
| | | Gold | Black | 1-179188-3 | | | |

Vertical type

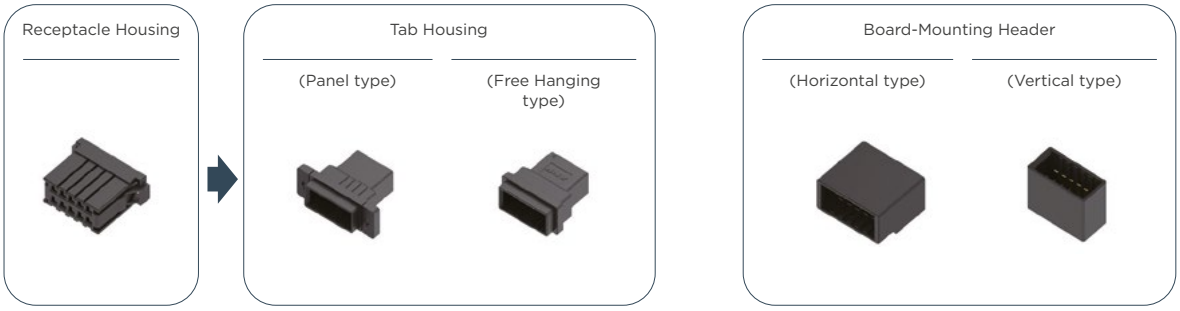



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 5 | X | Gold | Black | 1-177665-2 | 29.2 | 9.4 | 22.6 |

NOTE: All products are RoHS compliant On selection.

# D-3100D Double-row Standard Type – 3.81mm pin pitch

## Type Chart

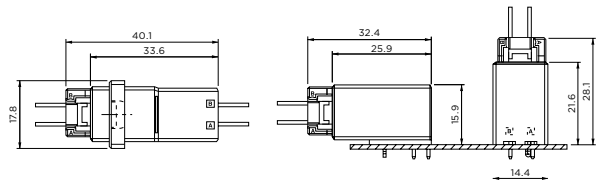



| Pos | Color | Key | Receptacle housing | Tab housing | | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | L Bracket | | Horizontal type | Vertical type |
| 6 | Black | X | 178289-3 | 178803-3 | 178964-3 | S | Gold | 178303-2 | 178323-2 |
| | Black | X | | | | S | | 178303-3 | 178323-3 |
| | Black | X | | | | S | Tin | 178303-5 | 178323-5 |
| 8 | Black | X | 178289-4 | — | 178964-4 | S | Gold | 1717412-2 | 1903601-2 |
| | Black | X | | | | S | | 1717412-3 | — |
| | Black | X | | | | S | Tin | — | 1903601-5 |
| 10 | Black | X | 178289-5 | 178803-5 | 178964-5 | L | Gold | 178305-2 | 178325-2 |
| | Black | X | | | | L | | 178305-3 | 178325-3 |
| | Black | X | | | | L | Tin | 178305-5 | 178325-5 |
| 12 | Black | X | 178289-6 | 178803-6 | 178964-6 | L | Gold | 178306-2 | 178326-2 |
| | Black | X | | | | L | | 178306-3 | 178326-3 |
| | Black | X | | | | L | Tin | 178306-5 | 178326-5 |
| 16 | Black | X | 178289-7 | 178803-7 | 178964-7 | L | Gold | 178307-2 | 178327-2 |
| | Black | X | | | | L | | 178307-3 | 178327-3 |
| | Black | X | | | | L | Tin | 178307-5 | 178327-5 |
| 20 | Black | X | 178289-8 | 178803-8 | 178964-8 | L | Gold | 178308-2 | 178328-2 |
| | Black | X | | | | L | | 178308-3 | 178328-3 |
| | Black | X | | | | L | Tin | 178308-5 | 178328-5 |

## Relative Product Information

Applicable contact...P.48
Performance & Specifications...P.45
Accessories...P.126

## Board-Mounting Header

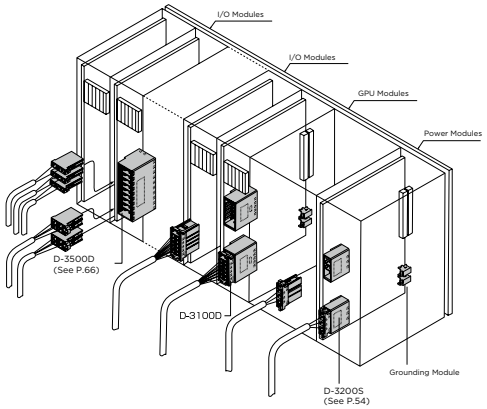



Panel /Free Hanging type

Horizontal /Vertical type

## Applications

Example of Programmable Controller Application

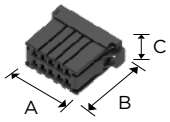



NOTE: All products are RoHS compliant On selection.

# D-3100D Double-row Standard Type – 3.81mm pin pitch

## External Dimensions

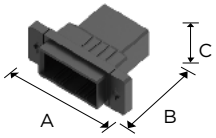
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 178289-3 | 24.4 | 22.8 | 12.5 |
| 8 | X | Black | 178289-4 | 28.2 | | |
| 10 | X | Black | 178289-5 | 32.0 | | |
| 12 | X | Black | 178289-6 | 35.8 | | |
| 16 | X | Black | 178289-7 | 42.7 | | |
| 20 | X | Black | 178289-8 | 51.0 | | |

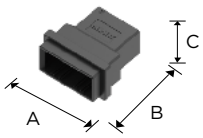
## Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 178803-3 | 40.0 | 33.6 | 17.8 |
| 10 | X | Black | 178803-5 | 47.0 | | |
| 12 | X | Black | 178803-6 | 51.0 | | |
| 16 | X | Black | 178803-7 | 59.0 | | |
| 20 | X | Black | 178803-8 | 67.0 | | |

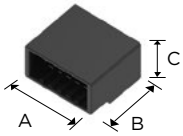
Free Hanging type



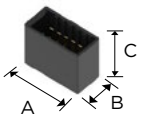

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 178964-3 | 25.6 | 33.6 | 17.8 |
| 8 | X | Black | 178964-4 | 29.4 | | |
| 10 | X | Black | 178964-5 | 33.2 | | |
| 12 | X | Black | 178964-6 | 37.0 | | |
| 16 | X | Black | 178964-7 | 44.6 | | |
| 20 | X | Black | 178964-8 | 52.2 | | |

## Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | X | Gold | Black | 178303-2 | 21.6 | 25.9 | 15.9 |
| | X | | Black | 178303-3 | | | |
| | X | Tin | Black | 178303-5 | | | |
| 8 | X | Gold | Black | 1717412-2 | 25.4 | | |
| | X | | Black | 1717412-3 | | | |
| 10 | X | Gold | Black | 178305-2 | 29.2 | | |
| | X | | Black | 178305-3 | | | |
| | X | Tin | Black | 178305-5 | | | |
| 12 | X | Gold | Black | 178306-2 | 33.1 | | |
| | X | | Black | 178306-3 | | | |
| | X | Tin | Black | 178306-5 | | | |
| 16 | X | Gold | Black | 178307-2 | 40.7 | | |
| | X | | Black | 178307-3 | | | |
| | X | Tin | Black | 178307-5 | | | |
| 20 | X | Gold | Black | 178308-2 | 48.3 | | |
| | X | | Black | 178308-3 | | | |
| | X | Tin | Black | 178308-5 | | | |

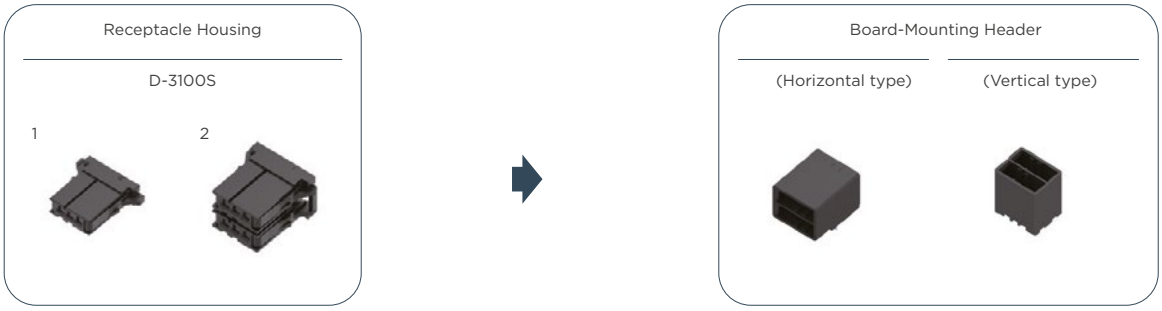



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | X | Gold | Black | 178323-2 | 21.6 | 14.4 | 21.6 |
| | X | | Black | 178323-3 | | | |
| | X | Tin | Black | 178323-5 | | | |
| 8 | X | Gold | Black | 1903601-2 | 25.4 | | |
| | X | Tin | Black | 1903601-5 | | | |
| 10 | X | Gold | Black | 178325-2 | 29.2 | | |
| | X | | Black | 178325-3 | | | |
| | X | Tin | Black | 178325-5 | | | |
| 12 | X | Gold | Black | 178326-2 | 33.1 | | |
| | X | | Black | 178326-3 | | | |
| | X | Tin | Black | 178326-5 | | | |
| 16 | X | Gold | Black | 178327-2 | 40.7 | | |
| | X | | Black | 178327-3 | | | |
| | X | Tin | Black | 178327-5 | | | |
| 20 | X | Gold | Black | 178328-2 | 48.3 | | |
| | X | | Black | 178328-3 | | | |
| | X | Tin | Black | 178328-5 | | | |

NOTE: All products are RoHS compliant On selection.

# D-3100M Double-row Standard Modular Type – 3.81mm pin pitch

## Type Chart

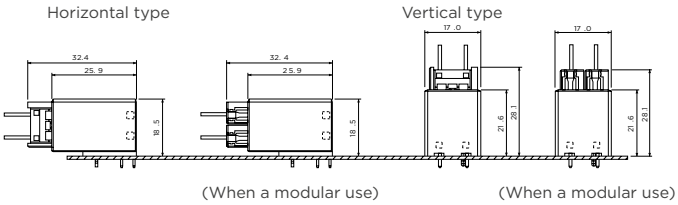



| Pos | Color | Key | Receptacle housing | | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1 row 3 pos. | 2 row 6 pos. | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 6 | Black | XX | 1-178288-3 (2) | 1-178127-6 (1) | – | – | Gold | 1-178137-2 | 1-178141-2 |
| | Black | | | | | | Gold | 1-178137-3 | 1-178141-3 |
| | Black | | | | | | Tin | 1-178137-5 | 1-178141-5 |
| | Black | YY | 2-178288-3 (2) | 2-178127-6 (1) | | | Gold | 2-178137-2 | – |
| | Black | | | | | | Tin | 2-178137-5 | |
| | Black | XY | 1-178288-3 (1)2-178288-3 (1) | 3-178127-6 (1) | | | Gold | 3-178137-2 | 3-178141-2 |
| | Black | | | | | | Gold | 3-178137-3 | 3-178141-3 |
| | Black | | | | | | Tin | 3-178137-5 | 3-178141-5 |

## Relative Product Information

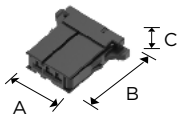
Applicable contact...P.48
Performance & Specifications ...P.45

## Mated Dimension

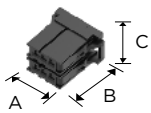



## External Dimensions

- Receptacle Housing



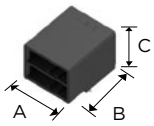

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-178288-3 | 26.8 | 22.8 | 7.2 |
| | Y | | 2-178288-3 | | | |




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-178127-6 | 24.8 | 22.8 | 14.8 |
| | YY | Black | 2-178127-6 | | | |
| | XY | Black | 3-178127-6 | | | |

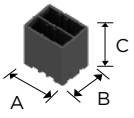
- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | XX | Gold | Black | 1-178137-2 | 21.6 | 25.9 | 18.5 |
| | | | Black | 1-178137-3 | | | |
| | | Tin | Black | 1-178137-5 | | | |
| | YY | Gold | Black | 2-178137-2 | | | |
| | | Tin | Black | 2-178137-5 | | | |
| | XY | Gold | Black | 3-178137-2 | | | |
| | | | Black | 3-178137-3 | | | |
| | | Tin | Black | 3-178137-5 | | | |

Vertical type

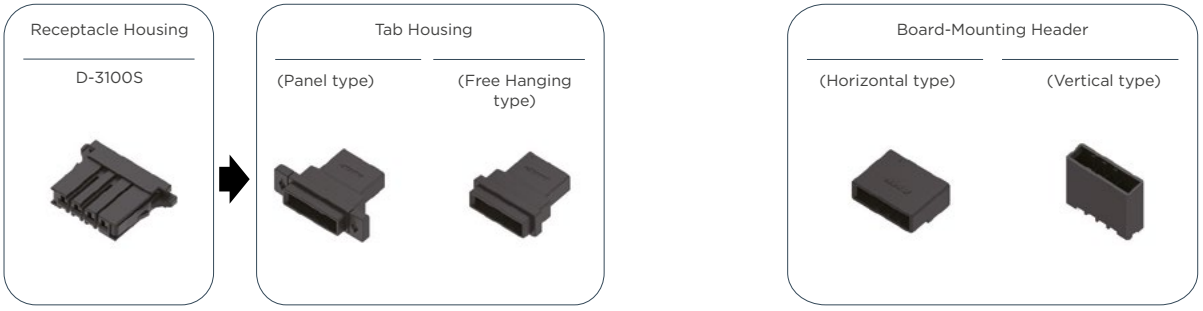



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | XX | Gold | Black | 1-178141-2 | 21.6 | 17.0 | 21.6 |
| | | | Black | 1-178141-3 | | | |
| | | Tin | Black | 1-178141-5 | | | |
| | XY | Gold | Black | 3-178141-2 | | | |
| | | | Black | 3-178141-3 | | | |
| | | Tin | Black | 3-178141-5 | | | |

NOTE: All products are RoHS compliant On selection.

# D-3200S Single-row High Voltage Type – 5.08mm pin pitch

## Type Chart




| Pos | Color | Key | Receptacle housing | Tab housing | | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | L Bracket | | Horizontal type | Vertical type |
| 2 | Black | X | 1-178128-2 | 1-179553-2 | 1-179552-2 | S | Gold | 1-179276-2 | 1-917337-2 |
| | Black | | | | | | Gold | 1-179276-3 | 1-917337-3 |
| | Black | | | | | | Tin | 1-179276-5 | 1-917337-5 |
| | Black | Y | 2-178128-2 | 2-179553-2 | 2-179552-2 | | Gold | 2-179276-2 | 2-917337-2 |
| | Black | | | | | | Gold | 2-179276-3 | 2-917337-3 |
| | Black | | | | | | Tin | — | 2-917337-5 |
| 3 | Black | X | 1-178128-3 | 1-179553-3 | 1-179552-3 | | Gold | 1-178138-2 | 1-178136-2 |
| | Black | | | | | | Gold | 1-178138-3 | 1-178136-3 |
| | Black | | | | | | Tin | 1-178138-5 | 1-178136-5 |
| | Black | Y | 2-178128-3 | 2-179553-3 | 2-179552-3 | | Gold | 2-178138-2 | 2-178136-2 |
| | Black | | | | | | Gold | 2-178138-3 | 2-178136-3 |
| | Black | | | | | | Tin | 2-178138-5 | 2-178136-5 |
| | Black | Z | 3-178128-3 | — | — | — | Tin | — | 3-178136-5 |
| 4 | Black | X | 1-178128-4 | 1-179553-4 | 1-179552-4 | S | Gold | 1-179277-2 | 1-917338-2 |
| | Black | | | | | | Gold | 1-179277-3 | 1-917338-3 |
| | Black | | | | | | Tin | 1-179277-5 | 1-917338-5 |
| | Black | Y | 2-178128-4 | 2-179553-4 | 2-179552-4 | | Gold | 2-179277-2 | 2-917338-2 |
| | Black | | | | | | Gold | 2-179277-3 | 2-917338-3 |
| | Black | | | | | | Tin | 2-179277-5 | 2-917338-5 |
| 5 | Black | X | 1-178128-5 | — | | | Gold | 1-316130-2 | 1-316132-2 |
| | Black | | | | | | Gold | 1-316130-3 | 1-316132-3 |
| | Black | | | | | | Tin | 1-316130-5 | 1-316132-5 |
| | Black | Y | 2-178128-5 | | | | Gold | 2-316130-2 | 2-316132-2 |
| | Black | | | | | | Gold | 2-316130-3 | 2-316132-3 |
| 6 | Black | X | 1-178128-6 | | | | Gold | 1-316131-2 | 1-316133-2 |
| | Black | | | | | | Gold | 1-316131-3 | 1-316133-3 |
| | Black | | | | | | Tin | 1-316131-5 | 1-316133-5 |
| | Black | Y | 2-178128-6 | | | | Gold | 2-316131-2 | 2-316133-2 |
| | Black | | | | | | Gold | — | 2-316133-3 |
| | Black | | | | | | Tin | 2-316131-5 | — |

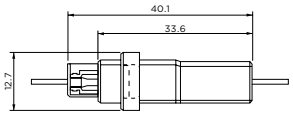
## Relative Product Information

Applicable contact...P.48
Performance & Specifications ...P.45
Accessories ...P.126

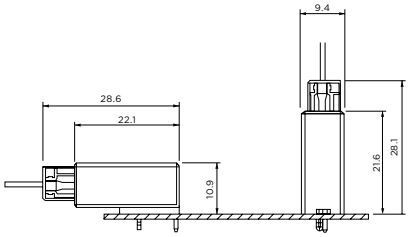
NOTE: All products are RoHS compliant On selection.

# D-3200S Single-row High Voltage Type – 5.08mm pin pitch

## Mated Dimension



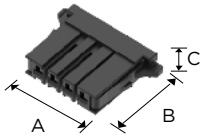

Panel /Free Hanging type




Horizontal /Vertical type

## External Dimensions

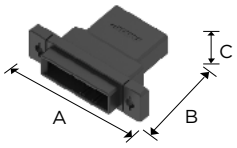
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-178128-2 | 24.6 | 22.8 | 7.2 |
| | Y | Black | 2-178128-2 | | | |
| 3 | X | Black | 1-178128-3 | 29.7 | | |
| | Y | Black | 2-178128-3 | | | |
| | Z | Black | 3-178128-3 | | | |
| 4 | X | Black | 1-178128-4 | 34.8 | | |
| | Y | Black | 2-178128-4 | | | |
| 5 | X | Black | 1-178128-5 | 39.9 | | |
| | Y | Black | 2-178128-5 | | | |
| 6 | X | Black | 1-178128-6 | 45.0 | | |
| | Y | Black | 2-178128-6 | | | |

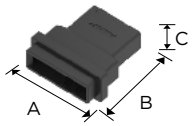
- Tab Housing

Panel type



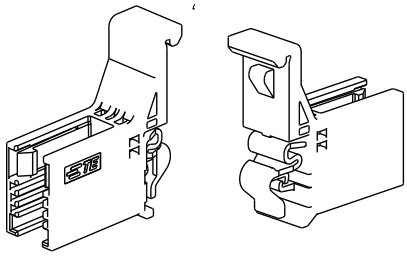

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-179553-2 | 36.8 | 33.6 | 12.7 |
| | Y | Black | 2-179553-2 | | | |
| 3 | X | Black | 1-179553-3 | 41.9 | | |
| | Y | Black | 2-179553-3 | | | |
| 4 | X | Black | 1-179553-4 | 47.0 | | |
| | Y | Black | 2-179553-4 | | | |

Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-179552-2 | 23.0 | 33.6 | 12.7 |
| | Y | Black | 2-179552-2 | | | |
| 3 | X | Black | 1-179552-3 | 28.1 | | |
| | Y | Black | 2-179552-3 | | | |
| 4 | X | Black | *1-179552-4 | 33.2 | | |
| | Y | Black | *2-179552-4 | | | |

*DIN rail attachment is available. P/N : 2822900-1
Applicable P/N : Δ-179552-4

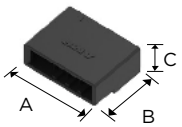


NOTE: All products are RoHS compliant On selection.

# D-3200S Single-row Standard – 5.08mm pin pitch

- Board-Mounting Header

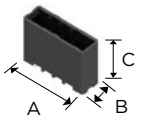
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-179276-2 | 19.1 | 22.1 | 10.9 |
| | | | Black | 1-179276-3 | | | |
| | | Tin | Black | 1-179276-5 | | | |
| | Y | Gold | Black | 2-179276-2 | | | |
| | | | Black | 2-179276-3 | | | |
| 3 | X | Gold | Black | 1-178138-2 | 24.2 | | |
| | | | Black | 1-178138-3 | | | |
| | | Tin | Black | 1-178138-5 | | | |
| | Y | Gold | Black | 2-178138-2 | | | |
| | | | Black | 2-178138-3 | | | |
| | | Tin | Black | 2-178138-5 | | | |
| 4 | X | Gold | Black | 1-179277-2 | 29.2 | | |
| | | | Black | 1-179277-3 | | | |
| | | Tin | Black | 1-179277-5 | | | |
| | Y | Gold | Black | 2-179277-2 | | | |
| | | | Black | 2-179277-3 | | | |
| | | Tin | Black | 2-179277-5 | | | |
| 5 | X | Gold | Black | 1-316130-2 | 34.3 | | |
| | | | Black | 1-316130-3 | | | |
| | | Tin | Black | 1-316130-5 | | | |
| | Y | Gold | Black | 2-316130-2 | | | |
| | | | Black | 2-316130-3 | | | |
| 6 | X | Gold | Black | 1-316131-2 | 39.4 | | |
| | | | Black | 1-316131-3 | | | |
| | | Tin | Black | 1-316131-5 | | | |
| | Y | Gold | Black | 2-316131-2 | | | |
| | | Tin | Black | 2-316131-5 | | | |

- Board-Mounting Header

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-917337-2 | 19.1 | 9.4 | 21.6 |
| | | | Black | 1-917337-3 | | | |
| | | Tin | Black | 1-917337-5 | | | |
| | Y | Gold | Black | 2-917337-2 | | | |
| | | | Black | 2-917337-3 | | | |
| | | Tin | Black | 2-917337-5 | | | |
| 3 | X | Gold | Black | 1-178136-2 | 24.2 | | |
| | | | Black | 1-178136-3 | | | |
| | | Tin | Black | 1-178136-5 | | | |
| | Y | Gold | Black | 2-178136-2 | | | |
| | | | Black | 2-178136-3 | | | |
| | | Tin | Black | 2-178136-5 | | | |
| | Z | Tin | Black | 3-178136-5 | | | |
| 4 | X | Gold | Black | 1-917338-2 | 29.2 | | |
| | | | Black | 1-917338-3 | | | |
| | | Tin | Black | 1-917338-5 | | | |
| | Y | Gold | Black | 2-917338-2 | | | |
| | | | Black | 2-917338-3 | | | |
| | | Tin | Black | 2-917338-5 | | | |
| 5 | X | Gold | Black | 1-316132-2 | 34.3 | | |
| | | | Black | 1-316132-3 | | | |
| | | Tin | Black | 1-316132-5 | | | |
| | Y | Gold | Black | 2-316132-2 | | | |
| | | | Black | 2-316132-3 | | | |
| 6 | X | Gold | Black | 1-316133-2 | 39.4 | | |
| | | | Black | 1-316133-3 | | | |
| | | Tin | Black | 1-316133-5 | | | |
| | Y | Gold | Black | 2-316133-2 | | | |
| | | | Black | 2-316133-3 | | | |

NOTE: All products are RoHS compliant On selection.

# D-3200M Double-row High Voltage Types – 5.08mm pin pitch

## Type Chart




| Pos | Color | Key | Receptacle housing (2) | Tab housing | | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | L Bracket | | Horizontal type | Vertical type |
| 6 | — | XX | 1-178129-6 | 1-179555-3 | 1-179554-3 | S | Gold | 1-178139-2 | 1-178140-2 |
| | — | | | | | S | Gold | 1-178139-3 | 1-178140-3 |
| | — | | | | | S | Tin | 1-178139-5 | 1-178140-5 |
| | — | YY | 2-178129-6 | 2-179555-3 | 2-179554-3 | S | Gold | 2-178139-2 | 2-178140-2 |
| | — | | | | | S | Gold | 2-178139-3 | 2-178140-3 |
| | — | | | | | S | Tin | 2-178139-5 | 2-178140-5 |
| | — | XY | 3-178129-6 | 3-179555-3 | 3-179554-3 | S | Gold | 3-178139-2 | 3-178140-2 |
| | — | | | | | S | Gold | 3-178139-3 | 3-178140-3 |
| | — | | | | | S | Tin | 3-178139-5 | 3-178140-5 |
| | — | YX | *(1) | — | — | — | Gold | 4-178139-2 | — |
| | — | ZX | *(1) | — | — | — | Tin | 6-178139-5 | — |
| 10 | — | XX | 1-917659-5 | — | — | — | Gold | 1-316080-2 | 1-917657-2 |
| | — | | | — | — | — | Gold | 1-316080-3 | 1-917657-3 |
| | — | | | — | — | — | Tin | 1-316080-5 | 1-917657-5 |
| | — | YY | 2-917659-5 | — | — | — | Gold | 2-316080-2 | 2-917657-2 |
| | — | | | — | — | — | Gold | 2-316080-3 | 2-917657-3 |
| | — | | | — | — | — | Tin | 2-316080-5 | 2-917657-5 |
| | — | XY | 3-917659-5 | — | — | — | Gold | 3-316080-2 | 3-917657-2 |
| | — | | | — | — | — | Gold | 3-316080-3 | 3-917657-3 |
| | — | | | — | — | — | Tin | 3-316080-5 | 3-917657-5 |
| 12 | — | XX | 1-917659-6 | 1-179555-6 | 1-179554-6 | L | Gold | 1-316081-2 | 1-917658-2 |
| | — | | | | | L | Gold | 1-316081-3 | 1-917658-3 |
| | — | | | | | L | Tin | 1-316081-5 | 1-917658-5 |
| | — | YY | 2-917659-6 | 2-179555-6 | — | L | Gold | 2-316081-2 | 2-917658-2 |
| | — | | | | | L | Gold | 2-316081-3 | 2-917658-3 |
| | — | | | | | L | Tin | — | — |
| | — | XY | 3-917659-6 | 3-179555-6 | 3-179554-6 | L | Gold | 3-316081-2 | 3-917658-2 |
| | — | | | | | L | Gold | 3-316081-3 | 3-917658-3 |
| | — | | | | | L | Tin | — | — |
| 20 | — | XX | 1-917659-8 | 1-179555-8 | — | — | — | — | — |

## Relative Product Information

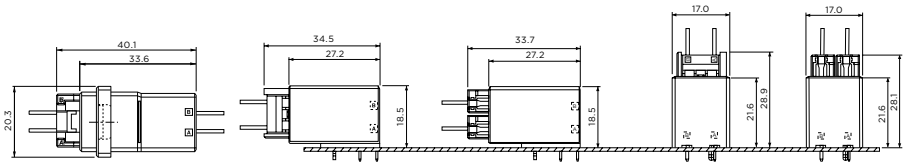
Applicable contact...P.48
Performance & Specifications ...P.45
Accessories ...P.126

For(1)D-3200S Receptacle housing, please see P.56
PN 1-178128-3 and 3-178128-3 are used.

NOTE: All products are RoHS compliant On selection.

# D-3200M Double-row High-voltage Modular Types – 5.08mm pin pitch

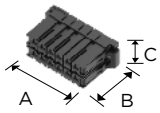
## Mated Dimension




Horizontal type (When a modular use) Vertical type (When a modular use)

## External Dimensions

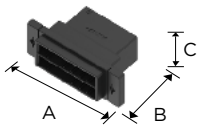
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-178129-6 | 27.3 | 22.8 | 14.8 |
| | YY | Black | 2-178129-6 | | | |
| | XY | Black | 3-178129-6 | | | |
| 10 | XX | Black | 1-917659-5 | 37.5 | | |
| | YY | Black | 2-917659-5 | | | |
| | XY | Black | 3-917659-5 | | | |
| 12 | XX | Black | 1-917659-6 | 42.5 | | |
| | YY | Black | 2-917659-6 | | | |
| | XY | Black | 3-917659-6 | | | |
| 20 | XX | Black | 1-917659-8 | 62.9 | | |

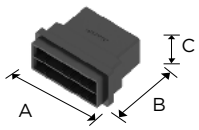
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-179555-3 | 41.9 | 33.6 | 20.3 |
| | YY | Black | 2-179555-3 | | | |
| | XY | Black | 3-179555-3 | | | |
| 12 | XX | Black | 1-179555-6 | 57.9 | | |
| | YY | Black | 2-179555-6 | | | |
| | XY | Black | 3-179555-6 | | | |
| 20 | XX | Black | 1-179555-8 | 78.2 | | |

Free Hanging type



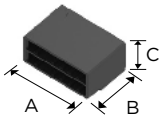

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-179554-3 | 28.1 | 33.6 | 20.3 |
| | YY | Black | 2-179554-3 | | | |
| | XY | Black | 3-179554-3 | | | |
| 12 | XX | Black | 1-179554-6 | 43.4 | | |
| | XY | Black | 3-179554-6 | | | |

NOTE: All products are RoHS compliant On selection.

# D-3200M Double-row High-voltage Modular Types – 5.08mm pin pitch

## Board-Mounting Header

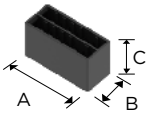
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | XX | Gold | Black | 1-178139-2 | 24.2 | 27.2 | 18.5 |
| | | Gold | Black | 1-178139-3 | | | |
| | | Tin | Black | 1-178139-5 | | | |
| | YY | Gold | Black | 2-178139-2 | | | |
| | | Gold | Black | 2-178139-3 | | | |
| | | Tin | Black | 2-178139-5 | | | |
| | XY | Gold | Black | 3-178139-2 | | | |
| | | Gold | Black | 3-178139-3 | | | |
| | | Tin | Black | 3-178139-5 | | | |
| | YX | Gold | Black | 4-178139-2 | | | |
| | ZX | Tin | Black | 6-178139-5 | | | |
| 10 | XX | Gold | Black | 1-316080-2 | 34.3 | | |
| | | Gold | Black | 1-316080-3 | | | |
| | | Tin | Black | 1-316080-5 | | | |
| | YY | Gold | Black | 2-316080-2 | | | |
| | | Gold | Black | 2-316080-3 | | | |
| | | Tin | Black | 2-316080-5 | | | |
| | XY | Gold | Black | 3-316080-2 | | | |
| | | Gold | Black | 3-316080-3 | | | |
| | | Tin | Black | 3-316080-5 | | | |
| 12 | XX | Gold | Black | 1-316081-2 | 39.4 | | |
| | | Gold | Black | 1-316081-3 | | | |
| | | Tin | Black | 1-316081-5 | | | |
| | YY | Gold | Black | 2-316081-2 | | | |
| | | Gold | Black | 2-316081-3 | | | |
| | | Tin | Black | — | | | |
| | XY | Gold | Black | 3-316081-2 | | | |
| | | Gold | Black | 3-316081-3 | | | |

## Board-Mounting Header

Vertical type

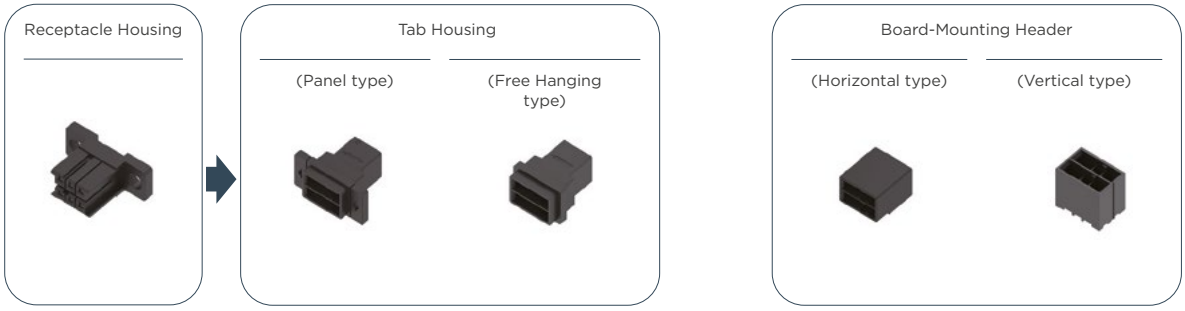



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | XX | Gold | Black | 1-178140-2 | 24.2 | 17.0 | 21.6 |
| | | Gold | Black | 1-178140-3 | | | |
| | | Tin | Black | 1-178140-5 | | | |
| | YY | Gold | Black | 2-178140-2 | | | |
| | | Gold | Black | 2-178140-3 | | | |
| | | Tin | Black | 2-178140-5 | | | |
| | XY | Gold | Black | 3-178140-2 | | | |
| | | Gold | Black | 3-178140-3 | | | |
| | | Tin | Black | 3-178140-5 | | | |
| 10 | XX | Gold | Black | 1-917657-2 | 34.3 | | |
| | | Gold | Black | 1-917657-3 | | | |
| | | Tin | Black | 1-917657-5 | | | |
| | YY | Gold | Black | 2-917657-2 | | | |
| | | Gold | Black | 2-917657-3 | | | |
| | | Tin | Black | 2-917657-5 | | | |
| | XY | Gold | Black | 3-917657-2 | | | |
| | | Gold | Black | 3-917657-3 | | | |
| | | Tin | Black | 3-917657-5 | | | |
| 12 | XX | Gold | Black | 1-917658-2 | 39.4 | | |
| | | Gold | Black | 1-917658-3 | | | |
| | | Tin | Black | 1-917658-5 | | | |
| | YY | Gold | Black | 2-917658-2 | | | |
| | | Gold | Black | 2-917658-3 | | | |
| | | Tin | Black | — | | | |
| | XY | Gold | Black | 3-917658-2 | | | |
| | | Gold | Black | 3-917658-3 | | | |
| | | Tin | Black | — | | | |

NOTE: All products are RoHS compliant On selection.

# D-3200M Double-row High-voltage Modular Types – 5.08mm pin pitch

## Type Chart



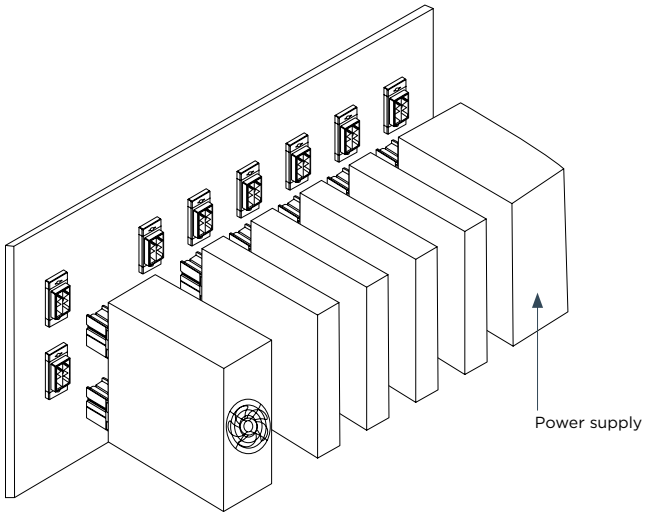

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 6 | Black | XX | 1-917266-3 | 1-179555-3 | 1-179554-3 | Gold | 1-178139-2 | 1-178140-2 |
| | | | | | | Gold | 1-178139-3 | 1-178140-3 |
| | | | | | | Tin | 1-178139-5 | 1-178140-5 |

## Relative Product Information

Applicable contact...P.48
Performance & Specifications ...P.45
Accessories ...P.126

## Applications

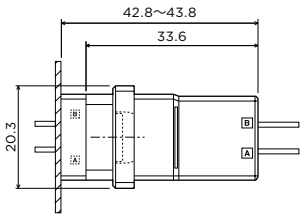
Example of Compact Disk Device Application



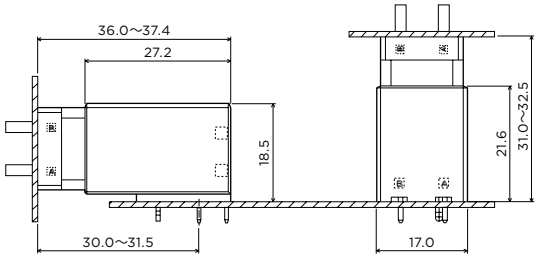

NOTE: All products are RoHS compliant On selection.

# D-3200M Double-row High voltage Drawer Types – 5.08mm pin pitch

## Mated Dimension



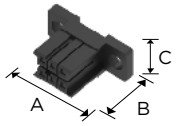

Panel /Free Hanging type




Horizontal /Vertical type

## External Dimensions

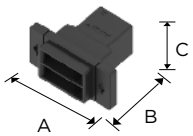
- Receptacle Housing (Drawer type)




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-917266-3 | 40.0 | 25.7 | 15.4 |

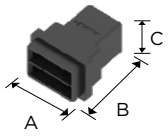
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | cB | C |
| 6 | XX | Black | 1-179555-3 | 41.9 | 33.6 | 20.3 |

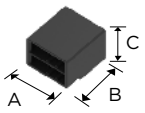
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-179554-3 | 28.1 | 33.6 | 20.3 |

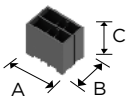
- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | XX | Gold | Black | 1-178139-2 | 24.2 | 27.2 | 18.5 |
| | | | Black | 1-178139-3 | | | |
| | | Tin | Black | 1-178139-5 | | | |

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | XX | Gold | Black | 1-178140-2 | 24.2 | 17.0 | 21.6 |
| | | | Black | 1-178140-3 | | | |
| | | Tin | Black | 1-178140-5 | | | |

NOTE: All products are RoHS compliant On selection.

# D-3200 FMLB (Sequential Type) – 5.08mm pin pitch

## Type Chart

Receptacle Housing



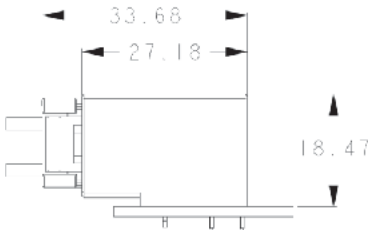
Board-Mounting Header

(Horizontal type)



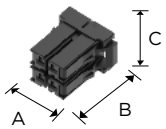
| Pos | Key | Color | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 4 | RR | Black | 1-2303376-1 | – | | Gold | 1-2299004-1 | – |
| | SS | Black | 2-2303376-1 | | | Gold | 2-2299004-1 | |
| 12 | RR | Black | 1-2303378-1 | | | Gold | 1-2299005-1 | |
| | SS | Black | 2-2303378-1 | | | Gold | 2-2299005-1 | |
| | RS | Black | 3-2303378-1 | | | Gold | 3-2299005-1 | |

## Mated Dimension




## External Dimensions

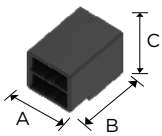
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | RR | Black | 1-2291727-1 | 14.2 | 22.8 | 14.8 |
| | SS | Black | 2-2291727-1 | | | |
| 12 | RR | Black | 1-2291728-1 | 34.5 | | |
| | SS | Black | 2-2291728-1 | | | |

- Board-Mounting Header

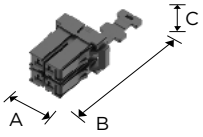
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | RR | – | Black | 1-2299004-1 | 14.2 | 22.8 | 14.8 |
| | SS | | Black | 2-2299004-1 | | | |
| 12 | RR | | Black | 1-2299005-1 | 34.5 | | |
| | SS | | Black | 2-2299005-1 | | | |
| | RS | | Black | 3-2299005-1 | | | |

Strain relief (optional)

| Pos | Key | Color | Part Number |
|---|---|---|---|
| 4 | RR | Black | 1-2303376-1 |
| | SS | Black | 2-2303376-1 |
| 12 | RR | Black | 1-2303378-1 |
| | SS | Black | 2-2303378-1 |
| | RS | Black | 3-2303378-1 |




## Relative Product Information

Applicable contact...P.48
Performance & Specifications ...P.45
Accessories ...P.126

NOTE: All products are RoHS compliant On selection.

# D-3200T Triple-row High Voltage Modular Types – 5.08mm pin pitch

## Type Chart

Receptacle Housing



Board-Mounting Header

(Horizontal type)



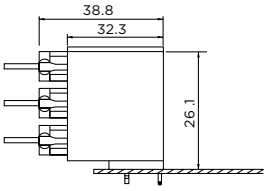
| Receptacle Housing (maximum 9 Pos.) | | | | | |
|---|---|---|---|---|---|
| Single-Row (D-3200S) *1 | | | Double-Row (D-3200M)Single-Row (D-3200S) *1 | | |
| POS | KEY | Part Number | POS | KEY | Part Number |
| 3 | X | 1-178128-3 | 6 | XX | 1-178129-6 |
| 3 | X | 1-178128-3 | | | |
| 3 | X | 1-178128-3 | 3 | X | 1-178128-3 |
| 3 | X | 1-178128-3 | 3 | Y | 2-178128-3 |
| 3 | X | 1-178128-3 | 6 | XX | 1-178129-6 |
| 3 | Y | 2-178128-3 | | | |
| 3 | Y | 2-178128-3 | 3 | X | 1-178129-3 |
| 3 | Y | 2-178128-3 | 6 | YY | 2-178129-6 |
| 3 | X | 1-178128-3 | | | |
| 3 | X | 1-178128-3 | 3 | X | 1-178129-3 |
| 3 | Y | 2-178128-3 | 6 | XY | 3-178129-6 |
| 3 | X | 1-178128-3 | | | |
| 3 | Z | 3-178128-3 | 3 | Z | 3-178129-3 |
| 3 | Y | 2-178128-3 | 6 | XY | 3-178129-6 |
| 3 | X | 1-178128-3 | | | |

| Board-Mounting Header | | | |
|---|---|---|---|
| Horizontal type (D-3200T) | | | |
| POS | KEY | Plating | Part Number |
| 9 | XXX | Gold | 1-1123624-2 |
| | | Tin | 1-1123624-5 |
| 9 | XXY | Gold | 3-1123624-2 |
| | | Tin | 3-1123624-5 |
| 9 | YYX | Gold | 4-1123624-2 |
| | | Tin | 4-1123624-5 |
| 9 | XYX | Gold | 5-1123624-2 |
| | | Tin | 5-1123624-5 |
| 9 | XYZ | Gold | 9-1123624-2 |

## Relative Product Information

Applicable contact...P.48
Performance & Specifications ...P.45
*1 : P.56

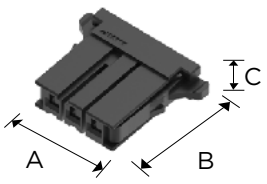
## Mated Dimension




Horizontal type

## External Dimensions

- Receptacle Housing

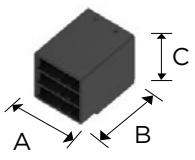



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-178128-3 | 29.7 | 22.8 | 7.2 |
| | Y | Black | 2-178128-3 | | | |
| | Z | Black | 3-178128-3 | | | |
| 6 | XX | Black | 1-178129-6 | 27.3 | | 14.8 |
| | YY | Black | 2-178129-6 | | | |
| | XY | Black | 3-178129-6 | | | |

NOTE: All products are RoHS compliant On selection.

- Board-Mounting Header

Horizontal type

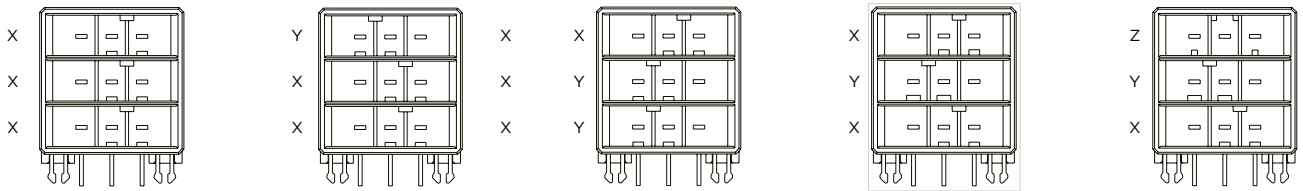



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 9 | XXX | Gold | Black | 1-1123624-2 | 24.2 | 32.3 | 27.1 |
| | | Tin | Black | 1-1123624-5 | | | |
| | XXY | Tin | Black | 3-1123624-5 | | | |
| | YYX | Tin | Black | 4-1123624-5 | | | |
| | XYX | Gold | Black | 5-1123624-2 | | | |
| | XYZ | Gold | Black | 9-1123624-2 | | | |

# D-3200T Triple-row High-voltage Modular Type – Key Description

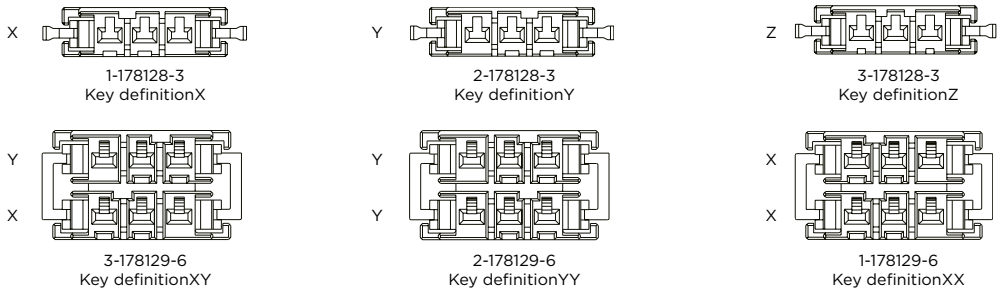
- Board-Mounting Header – horizontal type

Key Type

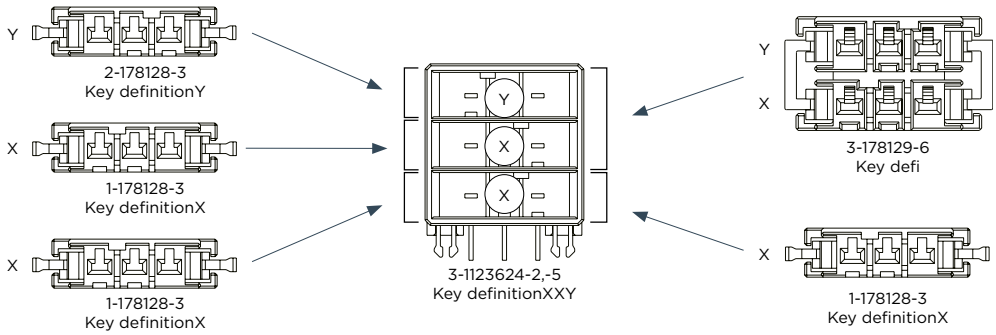



- Receptacle Housing, single-row, double-row

Key Type




- Application Examples of Key Matching




| Receptacle Housing (9 positions) | | | | | |
|---|---|---|---|---|---|
| Single-row (D-3200S) *1 | | | Double-row (D-3200M) Single-row (D-3200S) *1 | | |
| Pos | Key | Part Number | Pos | Pos | Part Number |
| 3 | X | 1-178128-3 | 6 | XX | 1-178129-6 |
| | X | 1-178128-3 | | | |
| | X | 1-178128-3 | 3 | X | 1-178128-3 |
| | X | 1-178128-3 | 3 | Y | 2-178128-3 |
| | X | 1-178128-3 | 6 | XX | 1-178129-6 |
| | Y | 2-178128-3 | | | |
| | Y | 2-178128-3 | 3 | X | 1-178128-3 |
| | Y | 2-178128-3 | 6 | YY | 2-178129-6 |
| | X | 1-178128-3 | | | |
| | X | 1-178128-3 | 3 | X | 1-178128-3 |
| | Y | 2-178128-3 | 6 | XY | 3-178129-6 |
| | X | 1-178128-3 | | | |
| | Z | 3-178128-3 | 3 | Z | 3-178128-3 |
| | Y | 2-178128-3 | 6 | XY | 3-178129-6 |
| | X | 1-178128-3 | | | |

| Board-Mounting Header | | | |
|---|---|---|---|
| Horizontal type (D-3200T) | | | |
| Pos | Key | Plating | Part Number |
| 9 | XXX | Gold | 1-1123624-2 |
| | | Tin | 1-1123624-5 |
| 9 | XXY | Gold | 3-1123624-2 |
| | | Tin | 3-1123624-5 |
| 9 | YYX | Gold | 4-1123624-2 |
| | | Tin | 4-1123624-5 |
| 9 | XYX | Gold | 5-1123624-2 |
| | | Tin | 5-1123624-5 |
| 9 | XYZ | Gold | 9-1123624-2 |

NOTE: All products are RoHS compliant On selection.

# D-3400F Skyscraper Connectors – 3.81mm pin pitch

## Type Chart

Receptacle Housing



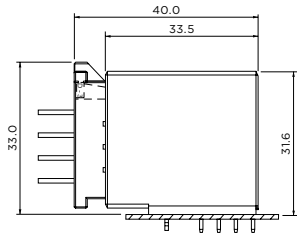
Board-Mounting Header

(Horizontal type)



| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 12 | Black | – | 178214-1 | – | – | Gold | 178216-2 | – |
| | Black | | | | | Gold | 178216-3 | |
| | Black | | | | | Tin | 178216-5 | |
| 20 | Black | | 917249-1 | | | Gold | 917251-2 | |
| | Black | | | | | Gold | 917251-3 | |
| | Black | | | | | Tin | 917251-5 | |

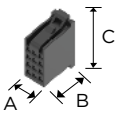
## Mated Dimension




Horizontal type

## External Dimensions

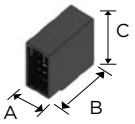
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 12 | – | Black | 178214-1 | 12.2 | 22.8 | 32.1 |
| 20 | | | 917249-1 | 19.8 | | |

- Board-Mounting Header

Horizontal type

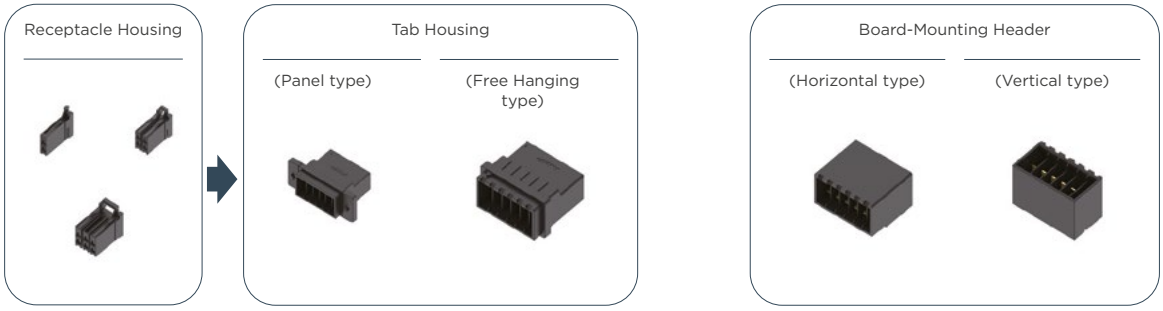



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 12 | – | Gold | Black | 178216-2 | 15.0 | 33.5 | 31.6 |
| | | Gold | Black | 178216-3 | | | |
| | | Tin | Black | 178216-5 | | | |
| 20 | | Gold | Black | 917251-2 | 22.6 | | |
| | | Gold | Black | 917251-3 | | | |
| | | Tin | Black | 917251-5 | | | |

NOTE: All products are RoHS compliant On selection.

# D-3500D Sensor Connector – 5.08mm pin pitch

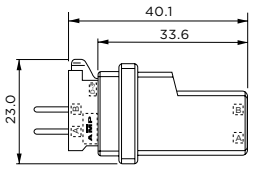
## Type Chart



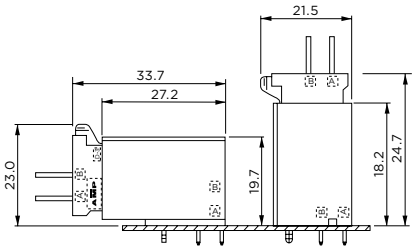

| Pos | Color | Key | Receptacle housing | Tab housing | | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | L Bracket | | Horizontal type | Vertical type |
| 2 | Black | – | 175362-1 | – | | | – | – | – |
| | | | 175362-2 | | | | | | |
| | | | 175362-3 | | | | | | |
| 4 | Black | | 175363-1 | – | | | Gold | 1376133-2 | |
| | White | | 1-175363-1 | | | | | | |
| | Black | | 175363-2* | | | | | | |
| | Blue | | 2-175363-1 | | | | | | |
| | Black | | 175363-3 | | | | | | |
| 6 | Black | | 1318095-1 | – | | | – | – | |
| | | | 1318095-2 | | | | | | |
| 12 | Black | | Possible to use several pieces of 2/4/6 pos receptacle housings with different combination to 12/20 pos. | 917241-6<br>3-917241-6 ** | 917242-6<br>3-917242-6 ** | S | Gold | 177555-2 | 316516-2 |
| | | | | | | | Gold | 177555-3 | 316516-3 |
| | | | | | | | Gold | 1-177555-2 | – |
| | | | | | | | Tin | 177555-5 | 316516-5 |
| 20 | Black | | | 917241-8<br>3-917241-8 ** | 917242-8<br>3-917242-8 ** | | Gold | 175365-2 | 316517-2 |
| | | | | | | | Gold | 175365-3 | 316517-3 |
| | | | | | | | Tin | 175365-5 | 316517-5 |

* Small Lever Type
** Triangle mark for position 1

## Mated Dimension




Horizontal type




Horizontal type

## Relative Product Information

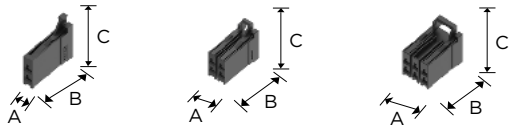
Applicable contact...P.48
Performance & Specifications ...P.45
Accessories ...P.126

NOTE: All products are RoHS compliant On selection.

# D-3500D Sensor Connector – 5.08mm pin pitch

## External Dimensions

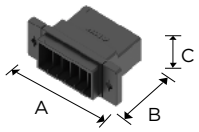
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | – | Black | 175362-1 | 4.6 | 22.8 | 21.0 |
| | | Black | 175362-2 | | | |
| | | Black | 175362-3 | | | |
| 4 | | Black | 175363-1 | 9.7 | | |
| | | White | 1-175363-1 | | | |
| | | Blue | 2-175363-1 | | | |
| | | Black | 175363-2 | | | |
| | | Black | 175363-3 | | | |
| 6 | | Black | 1318095-1 | 14.7 | | |
| | | Black | 1318095-2 | | | |

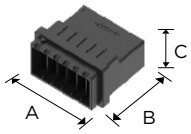
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 12 | – | Black | 917241-6 | 52.0 | 33.6 | 21.5 |
| | | Black | 3-917241-6 | | | |
| 20 | | Black | 917241-8 | 72.0 | | |
| | | Black | 3-917241-8 | | | |

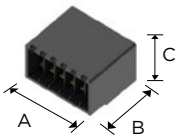
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 12 | – | Black | 917242-6 | 36.4 | 33.6 | 21.5 |
| | | Black | 3-917242-6 | | | |
| 20 | | Black | 917242-8 | 56.8 | | |
| | | Black | 3-917242-8 | | | |

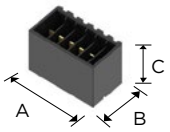
- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | – | Gold | Black | 1376133-2 | 12.2 | 27.2 | 19.7 |
| 12 | | | Black | 177555-2 | 32.5 | | |
| | | | Black | 177555-3 | | | |
| | | Tin | Black | 177555-5 | | | |
| | | Gold | Black | 1-177555-2 | | | |
| 20 | | | Black | 175365-2 | 52.8 | | |
| | | | Black | 175365-3 | | | |
| | | Tin | Black | 175365-5 | | | |

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 12 | – | Gold | Black | 316516-2 | 32.5 | 18.2 | 21.6 |
| | | | Black | 316516-3 | | | |
| | | Tin | Black | 316516-5 | | | |
| 20 | | Gold | Black | 316517-2 | 52.8 | | |
| | | | Black | 316517-3 | | | |
| | | Tin | Black | 316517-5 | | | |

NOTE: All products are RoHS compliant On selection.

# Spring Clamp Type

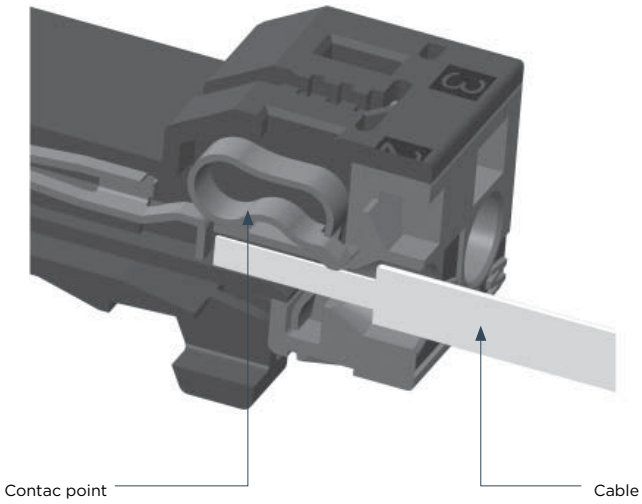
The Spring Clamp Type series is a spring clamp type connector applicable to Servo I/O application, etc.

Thanks to the on-site mounting without any crimping tools, working time can be saved significantly.



- Adopt the standard wiring method as Dynamic series, and Spring clamp type contacts on receptacle side which comply with UL1059.

Internal structure




- Applicable to ports of power supply series where a UL508 servo amplifier and inverter, etc. must be used.
- The implementation can be carried out on-site without any crimping tools. Compared to the spiral wiring method, working time is saved significantly.

## Product Features

**Spring clamp contact**
The contact is assembled in housing already with a spring clamp design which provide easy on-site installation, therefore increase the efficiency of assembly.

**Audible Latching**
Obvious lock sound and feeling when mating means work can be done without mistaks, such as mismating (halfmating), even if the connection cannot be seen.

**Keying**
The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating. It is also possible to make more key patterns by using keying plugs.

# Spring Clamp Series Performance and Specifications

## Performance

| Item \ Series | D-2950 | D-3950 | D-4950 | D-5900 |
|---|---|---|---|---|
| Contact pitch [mm] | 5.08 | 7.5 | 7.5 | 13.1 |
| Rated current max. UL [A] | 10 | 14.5 | 22 | 42 |
| Rated voltage UL1059 B [V] | 300 AC/DC | 300 AC/DC | 300 AC/DC | — |
| Rated voltage UL1059 C [V] | — | 300 AC/DC | 300 AC/DC | 600 AC/ DC |
| Rated voltage UL1059 D [V] | 300 AC/DC | 600 AC/DC | 600 AC/DC | — |
| Dielectric withstanding Voltage | 2,200V AC | 2,200V AC | 2,200V AC | 2200V AC |
| Wire size [AWG] | 18-14 | 22-14 | 10-16 | 16-8 |
| Wire size [mm²] | 0.75-2.0 | 0.3-2.0 | 1.25-5.5 | 1.25-8.0 |

## Performance

| Item \ Series | D-2950 | D-3950 | D-4950 | D-5900 |
|---|---|---|---|---|
| Product Specification | 108-140221 | 108-78997 | 108-140216 | 108-140022 |
| Application Specification | 408-78172 | 411-78272 | 408-78173 | 408-78067 |

## Performance

| Description | Material | Finish |
|---|---|---|
| Receptacle contact (mating area only) | Copper alloy | 0.38µm Gold plating over 1.27µm Nickel under plating |
| Board-mounting header contact | Copper alloy | Mating area: 0.38µm Gold plating over 1.27µm Nickel under plating Tail area: 2µm TIN plating over1.27µm Nickel under plating |
| Receptacle Housing Board-mounting header Housing | Thermoplastic PBT contain glass fiber, UL94V-0, | |

## Positions / Wire size / Rated current

### D-2950 series

| No of energized positions | Current(A) | | | | |
|---|---|---|---|---|---|
| | AWG14 | AWG16 | AWG18 | AWG20 | AWG22 |
| 5 | 11.25 | 10.5 | 9.5 | 8 | 6.5 |
| 6 | 10.5 | 9.75 | 9 | 7 | 5.5 |

### D-3950 series

| No of energized positions | Current(A) | | | | |
|---|---|---|---|---|---|
| | AWG14 | AWG16 | AWG18 | AWG20 | AWG22 |
| 1 | 14.5 | 13.75 | 13 | 10.75 | 8.7 |
| 2-5 | 12.75 | 11.75 | 10.25 | 8.25 | 7.2 |
| 6-11 | 11.8 | 9.75 | 8.75 | 7 | 5.5 |

### D-4950 series

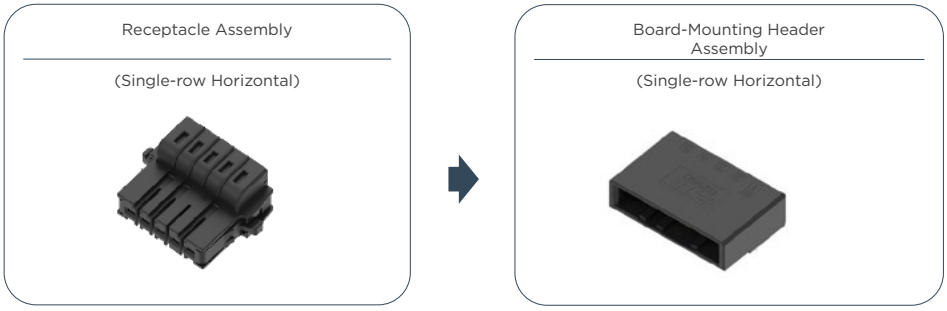
| No of energized positions | Current(A) | | | |
|---|---|---|---|---|
| | AWG10 | AWG12 | AWG14 | AWG16 |
| 8 | 22 | 19 | 15 | 10 |

### D-5900 series

| No of energized positions | Current(A) | | | | |
|---|---|---|---|---|---|
| | AWG14 | AWG16 | AWG18 | AWG20 | AWG22 |
| 4 | 42 | 30 | 20 | 15 | 10 |
| 6 | 35 | 30 | 20 | 15 | 10 |

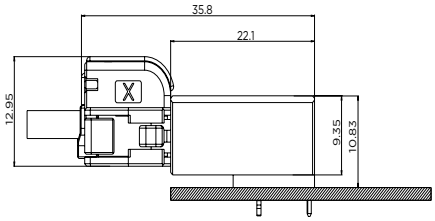
# D-2950 Spring Clamp Type – 5.08mm pin pitch

## Type Chart




| Pos | Key | Color | Circuit mark | Receptacle Assembly | Plating | Board-Mounting Header Assembly |
|---|---|---|---|---|---|---|
| | | | | Single-row Horizontal | | Single-row Horizontal |
| 5 | X | Black | Yes | 1-2347004-5 | Gold | 1-2347005-5 |
| 6 | X | Black | Yes | 1-2347004-6 | Gold | 1-2347005-6 |

## Mated Dimension

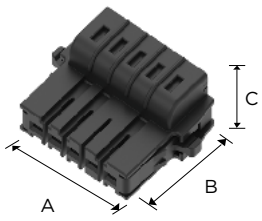



Special auxiliary tools for wire insertion and extraction: 2347681-1

## External Dimensions

- Receptacle Assembly

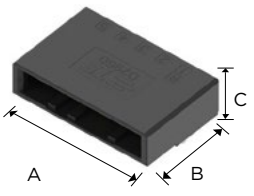
Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 5 | X | Gold | Black | 1-2347004-5 | 39.2 | 29.0 | 13.0 |
| 6 | | | | 1-2347004-6 | 44.3 | | |

- Board-Mounting Header Assembly

Single-Row Horizontal

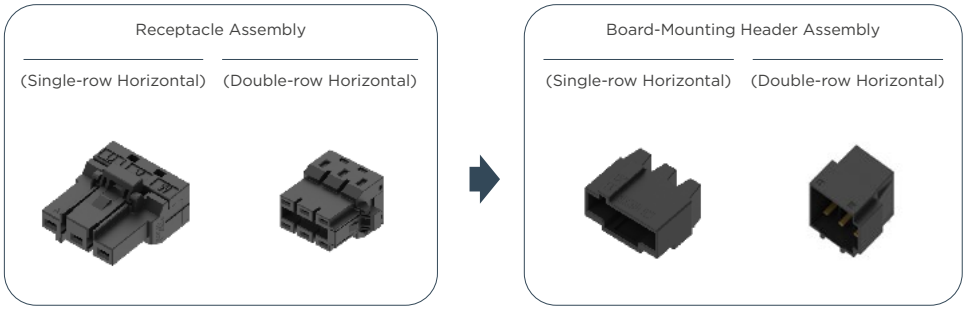



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 5 | X | Gold | Black | 1-2347005-5 | 34.3 | 22.1 | 10.9 |
| 6 | | | | 1-2347005-6 | 39.4 | | |

NOTE: All products are RoHS compliant On selection.

# D-3950 Spring Clamp Type – 7.5mm pin pitch

## Type Chart



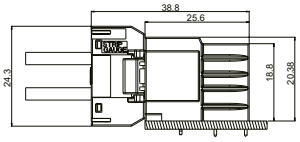

| Pos | Color | Key | Circuit mark | Receptacle Assembly | | Plating | Board-Mounting Header Assembly | |
|---|---|---|---|---|---|---|---|---|
| | | | | Single-row Horizontal | Double-row Horizontal | | Single-row Horizontal | Double-row Horizontal |
| 3 | Black | X | Yes | 3-2229794-1<br>1-2474564-1 | — | Gold | 3-2229803-1 | — |
| | Black | | No | 3-2289080-1 | | Gold | | |
| 4 | Black | X | Yes | 1-2331743-4 | | Gold | 1-2271457-4 | |
| | Black | X | No | 1-2331743-1 | | Gold | | |
| | Black | Y | No | 2-2331743-1 | | Gold | 2-2271457-4 | |
| 6 | Black | X | No | 1-2271454-6<br>1-2475329-6 | | Gold | 1-2271457-6<br>1-2474029-6 | |
| 6 | Black | — | Yes | — | 2229800-1<br>2475472-1 | Gold | — | 2229806-1 |
| * 7 | Black | Y | Yes | 1-2229794-2 | — | Gold | 1-2229803-2 | — |
| 8 | Black | X | Yes | 1-2349815-2 | | Gold | 1-2271457-8 | |
| 11 | Black | X | Yes | 1-2229794-1 | | Gold | 1-2229803-1<br>1-2474537-1 | |
| | Black | X | No | 1-2289080-1<br>1-2474552-1 | | Gold | | |

* The 7P connector is a 11P connector with 4 contacts removed.

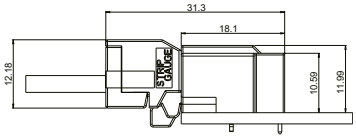
## Mated Dimension

Special auxiliary tools for wire insertion and extraction: 1981045-1

Double row



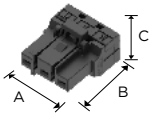

Single row




## External Dimensions

- Receptacle assembly

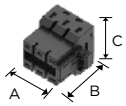
Single-Row Horizontal




| Pos | Key | Plating | Circuit Illustration | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | A | B | C |
| 3 | X | Gold | Yes | Black | 3-2229794-1 | 22.0 | 25.4 | 15.6 |
| | | Gold | No | Black | 3-2289080-1 | | | |
| 4 | X | Gold | Yes | Black | 1-2331743-4 | 27.7 | | |
| | | Gold | No | Black | 1-2331743-1 | | | |
| | Y | Gold | No | Black | 2-2331743-1 | | | |
| 6 | X | Gold | No | Black | 1-2271454-6 | 44.5 | | |
| * 7 | Y | Gold | Yes | Black | 1-2229794-2 | 82.0 | | |
| 8 | X | Gold | Yes | Black | 1-2349815-2 | 57.7 | | |
| 11 | X | Gold | Yes | Black | 1-2229794-1 | 82.0 | | |
| | | Gold | No | Black | 1-2289080-1 | | | |

* The 7P connector is a 11P connector with 4 contacts removed.

Double-row Horizontal

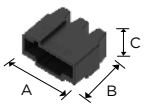



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 6 | — | Gold | Black | 2229800-1 | 25.2 | 25.6 | 20.4 |

NOTE: All products are RoHS compliant On selection.

- Board-Mounting Header Assembly

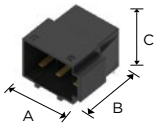
Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 3-2229803-1 | 22.0 | 18.1 | 12.0 |
| 4 | X | Gold | Black | 1-2271457-4 | 29.5 | | |
| | Y | Gold | Black | 2-2271457-4 | 29.5 | | |
| 6 | X | Gold | Black | 1-2271457-6 | 44.5 | | |
| * 7 | Y | Gold | Black | 1-2229803-2 | 82.0 | | |
| 8 | X | Gold | Black | 1-2271457-8 | 59.5 | | |
| 11 | X | Gold | Black | 1-2229803-1 | 82.0 | | |

* The 7P connector is a 11P connector with 4 contacts removed.

Double-row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 2229806-1<br>2470382-1 | 22.0 | 18.1 | 12.0 |

# D-4950 Spring Clamp Type – 7.5mm pin pitch

## Type Chart

Receptacle Assembly
(Single-row Horizontal)

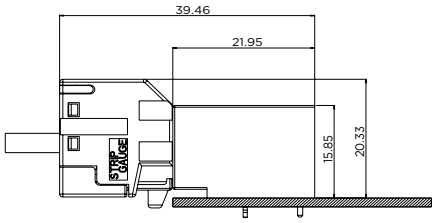


Board-Mounting Header Assembly
(Single-row Horizontal)



| Pos | Color | Key | Circuit mark | Receptacle Assembly<br>Single-row Horizontal | Plating | Board-Mounting Header Assembly<br>Single-row Horizontal |
|---|---|---|---|---|---|---|
| 8 | Black | X | Yes | 1-2349849-8 | Gold | 1-2349825-8 |

## Mated Dimension

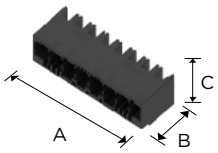



Special auxiliary tools for wire insertion and extraction: 2349891-1

## External Dimensions

- Receptacle assembly

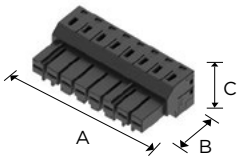
Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 8 | X | Gold | Black | 1-2349849-8 | 61.5 | 31.7 | 22.1 |

- Board-Mounting Header Assembly

Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 8 | X | Gold | Black | 1-2349825-8 | 61.5 | 22.0 | 15.9 |

NOTE: All products are RoHS compliant On selection.

# D-5900 Field Wiring Type – 13.1 mm pin pitch

## Type Chart

Receptacle Assembly

(Single-row Horizontal)



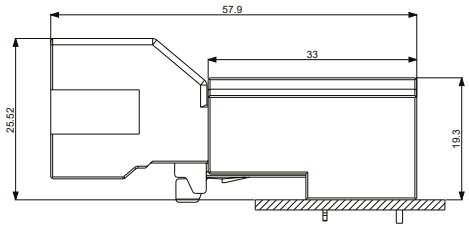
Tab Assembly

(Single-row Horizontal)



| Pos | Color | Key | Circuit Mark | Receptacle Assembly | Plating | Tab Assembly |
|---|---|---|---|---|---|---|
| | | | | Single-row horizontal type | | Single-row horizontal type |
| 4 | Black | X | Yes | 4-2260663-1 | Gold | 4-2260661-1 |
| 4 | | Y | | 4-2260663-2 | Gold | 4-2260661-1 |
| 6 | | X | | 6-2260663-1 | Gold | 6-2260661-1 |

## Mated Dimension

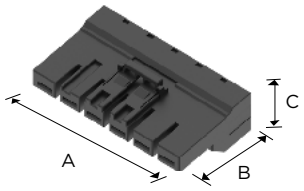



Special auxiliary tools for wire insertion and extraction: 2260828-1

## External Dimensions

- Receptacle assembly

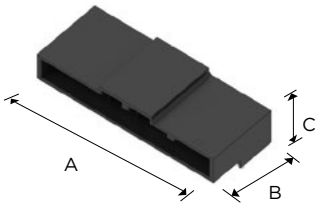
Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | X | Gold | Black | 4-2260663-1 | 52.9 | 45.9 | 25.9 |
| 4 | Y | Gold | Black | 4-2260663-2 | | | |
| 6 | X | Gold | Black | 6-2260663-1 | 79.1 | | |

- Tab Assembly

Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | X | Gold | Black | 4-2260661-1 | 57.6 | 33 | 19.3 |
| 4 | Y | Gold | Black | 4-2260661-1 | | | |
| 6 | X | Gold | Black | 6-2260661-1 | 83.8 | | |

NOTE: All products are RoHS compliant On selection.

# On-site Push-in Type

The On-site push-in type series is applicable to the power input and output of servo control systems.

The compact size saves space on the board and facilitates the high-density design of the board. The vertically plugging design and the newly added cable unplugging button make the “tool-free” on-site mounting possible.

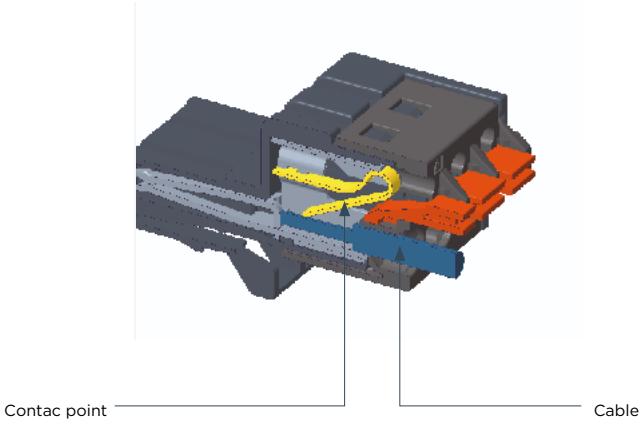
The high temperature housing material applicable to reflow soldering and the economical version enrich the choice of connectors for the servo application.

The On-site push-in type series inherits the Dynamic’s high reliability, audible & tactile locking system and key design to provide a more efficient solution for the installation process.



- Adopt the standard wiring method as Dynamic series, and Spring clamp type contacts on receptacle side which comply with UL1059.

Internal structure




- Applicable to ports of power supply series where a UL508 servo amplifier and inverter, etc. must be used.
- The implementation can be carried out on-site without any crimping tools. Compared to the spiral wiring method, working time is saved significantly.

## Product Features

**1. Release button design**
On-site Push-in type has a release button design, which could support wire inserting and removing of the connector, therefore achieving toolless assembly.

**2.Spring clamp contact**
The contact is assembled in housing already with a spring clamp design which provide easy on-site installation, therefore increase the efficiency of assembly.

**3.High temperature housing material**
Housing is made of high temperature material, therefore withstand reflow soldering process.

**4. Three different Header options**
Three different Headers-including horizontal header, vertical header and reversed header-which fit to varies of application needs.

**5. Two plating types**
Both gold plating and tin plating contacts balance the high reliability and economical requests.

**6.Center locking**
This is the first application of a center lock in Dyamic series. On-board space requirements can be mounted in a tight space for high-density mounting on boards requiring signal lines.

**7.Audible Latching**
Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (halfmating), even if the connection cannot be seen.

# Spring Clamp Series Performance and Specifications

## Performance

| Item \ Series | D-2970 |
|---|---|
| Contact pitch [mm] | 5.0 |
| Rated current max. UL [A] | 10 (AWG14 x 1) |
| Rated voltage UL1059 B [V] | 20 (AWG14 x 1) |
| Rated voltage UL1059 C [V] | 300 AC/DC |
| Rated voltage UL1059 D [V] | 400 AC/DC |
| Dielectric withstanding Voltage | 2,200V AC |
| Wire size [AWG] | 18-14 |
| Wire size [c] | 0.75-2.0 |

## Product Specifications

| Item \ Series | D-2970 |
|---|---|
| Product manual | 108-140223 |
| Operation manual | 408-78171 |

## Positions / Wire size / Rated current

### D-2970 Series

| Pos | Current(A) | | | | | | |
|---|---|---|---|---|---|---|---|
| | AWG 26 | AWG 24 | AWG 22 | AWG 20 | AWG 18 | AWG 16 | AWG 14 |
| 3 | 4.5 | 5.5 | 7 | 8 | 9.5 | 11.5 | 15 |
| 4 | 4 | 4.5 | 6 | 7.5 | 9 | 11.5 | 14 |
| Reference UL1059Limit | 1 | 2 | 3 | 5 | 7 | 10 | 15 |

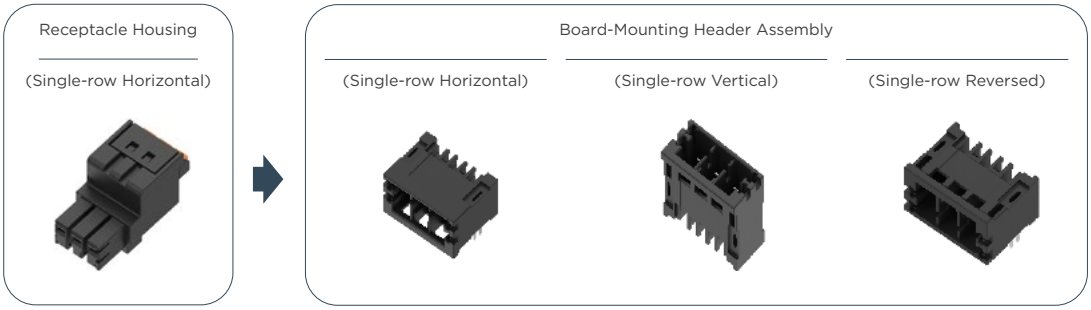
When spec is over UL1059 limit, UL1059 requirement equipment shall use Limit current.

## Materials and Plating

| Description | Material | Finisher |
|---|---|---|
| Receptacle contact (Only at the contactpoint) | Copper alloy | 1.0 µm Tin plating over 1.27 µm Nickel under-plated |
| Board-mounting h eader contact | Copper alloy | Mating area: 2.5 µm Tin plating over 1.27 µm Nickel under-plated Tail area: 2 µm Tin platingover 1.27 µm Nickel under-plated |
| Receptacle Housing Board-mounting header Housing | Liquid Crystal Plastic (LCP), UL94V-0 | |

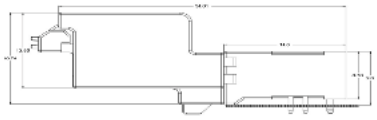
# D-2970 On-site Push-in Type – 5.0mm pin pitch

## Type Chart

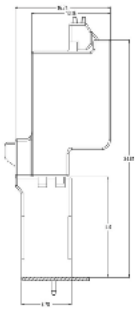



| Pos | Color | Key | | Receptacle Assembly | Board Mounting Header Assembly | | |
|---|---|---|---|---|---|---|---|
| | | | | Single-Row Horizontal | Single-Row Horizontal | Single-row Vertical | Single-row Reversed |
| 3 | Black | X | Tin | 2336488-3 | 2336490-3 | 2336494-3 | 2336491-3 |
| 3 | Black | X | Gold | 2-2336488-3 | 2-2336490-3 | 2-2336494-3 | 2-2336491-3 |
| 4 | Black | X | Tin | 2336488-4 | 2336490-4 | 2336494-4 | 2336491-4 |
| 4 | Black | X | Gold | 2-2336488-4 | 2-2336490-4 | 2-2336494-4 | 2-2336491-4 |

## Mated Dimension



Single-Row Horizontal



Single-row Vertical

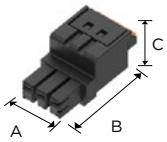


Single-row Reversed

## External Dimensions

- Receptacle Assembly

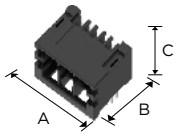
Single-Row Horizontal




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Tin | Black | 2336488-3 | 17 | 34 | 18.7 |
| 3 | X | Gold | Black | 2-2336488-3 | | | |
| 4 | X | Tin | Black | 2336488-4 | 22 | | |
| 4 | X | Gold | Black | 2-2336488-4 | | | |

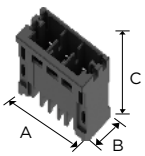
- Board-Mounting Header Assembly

Single-Row Horizontal



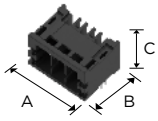

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Tin | Black | 2336488-3 | 17 | 34 | 18.7 |
| 3 | X | Gold | Black | 2-2336488-3 | | | |
| 4 | X | Tin | Black | 2336488-4 | 22 | | |
| 4 | X | Gold | Black | 2-2336488-4 | | | |

Single-Row Vertical




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Tin | Black | 2336494-3 | 19.9 | 9.8 | 14.8 |
| 3 | X | Gold | Black | 2-2336494-3 | | | |
| 4 | X | Tin | Black | 2336494-4 | 24.9 | | |
| 4 | X | Gold | Black | 2-2336494-4 | | | |

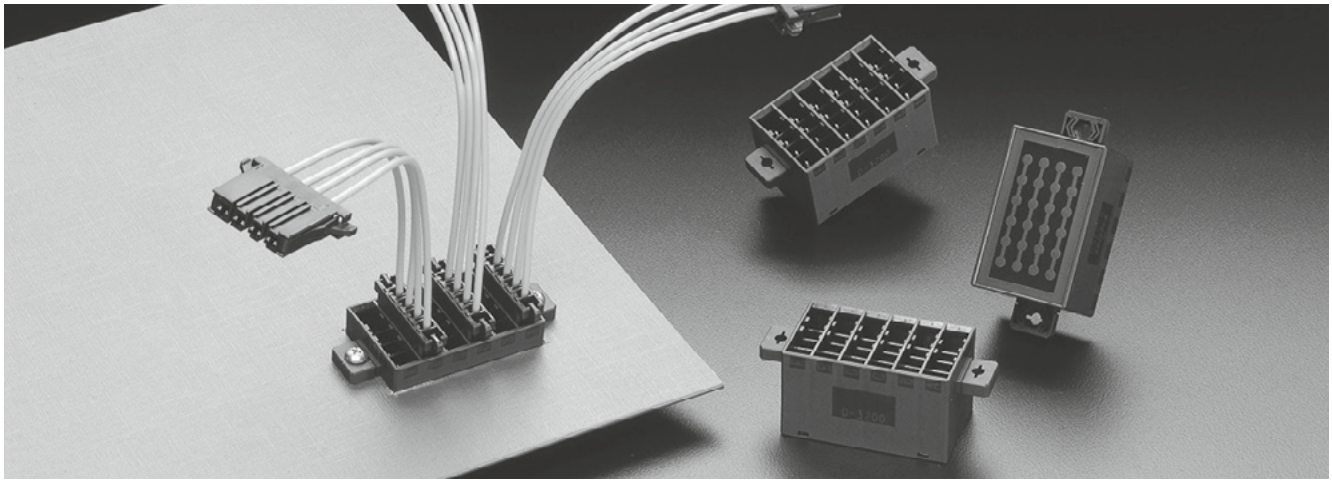
Single-Row Reversed




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Tin | Black | 2336491-3 | 19.9 | 14.8 | 9.8 |
| 3 | X | Gold | Black | 2-2336491-3 | | | |
| 4 | X | Tin | Black | 2336491-4 | 24.9 | | |
| 4 | X | Gold | Black | 2-2336491-4 | | | |

NOTE: All products are RoHS compliant On selection.

# Tap Connector: Dyna-Tap Connectors



## Tap Connector: Dyna-Tap Connectors

The common FA equipment is a device formed by combining functionally separated units in a final process. Tap on the circuit board was the original method used for supplying power to each unit.

Therefore, TE developed a tap connector with tap function—Dyna-Tap, which will not further burden the circuit board of which the space should be further saved in the future.

Dyna-Tap Connectors is a Dynamic series tap connector developed as an FA power connector, so it is the most suitable product for tap of the main power cable. (An application has been made for the design of its appearance)

Its specification is 6P to support the tap of the 3-phase power cable system widely used in the industry.

The relay type and panel type of the product has been developed. The matching model is 1-178288-6.

## D-3100 Dyna-Tap18P(6Px3ROW)

**Highlight**
Since in most applications it is fixed outside the circuit board (chassis), a dust cover is installed to prevent dust from entering the inside of the housing. Therefore, it can be used in harsh environments.

**Application**
- Power tap in the elevator control room
- Power tap of power protection relays, etc.
- Power tap in the semiconductor production equipment unit room
- Power supply for production line equipment

**Performance**
- Rated voltage: 250V AC/DC
- Rated current: : 8A (when the 18P and AWG#14 are used)
- No of Pos.: 6Px3 = 18P (6P tap)
- Durability 500 cycles
- Product standard: 108-5754

## D-3200 Dyna-Tap24P(4Px6ROW)

**Highlight 1**
The Dynamic series connectors and contacts can be used. It is a power supply board that uses the Dynamic series (D-3200S 4P REC) with excellent connection reliability and gain high reputation. Compared to terminal blocks, its installation and maintenance costs are reduced significantly. Meanwhile, compatible terminals enable less costs of use and inventory.

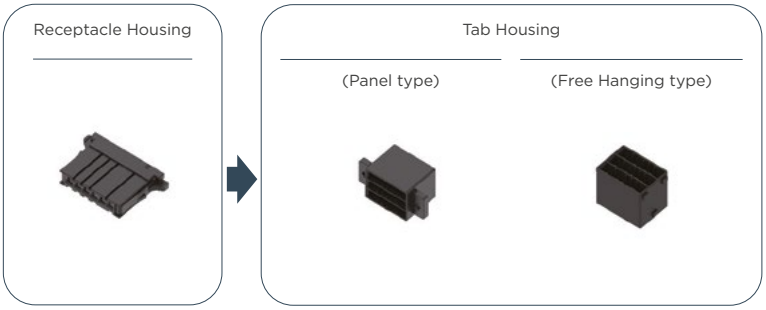
**Highlight 2**
Positions of Power board installation can be set freely. Considering that the relay type and panel type connectors are used jointly, panel type with fixtures near to opener or buttom are both available.

**Highlight 3**
Cost advantage by reducing number of components used and saving working hours on installation.

**Other highlights**
- The Tin plated and Gold-plated type (0.38 µm) are provided.
- The back is engraved with an electrical connection diagram.

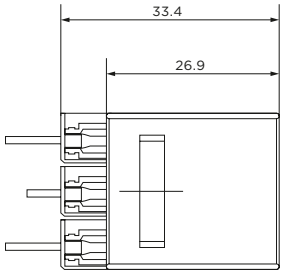
# D-3100 Dyna-Tap 18P (6Px3ROW), 24P (6Px4ROW) – 3.81mm pin pitch

## Type Chart



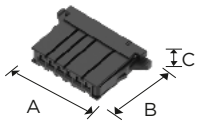

| Pos | Color | Key | Receptacle housing | Tab housing | | Through-hole | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | | Horizontal type | Vertical type |
| 6 | Black | X | 1-178288-6 | — | — | — | — | — | — |
| 18 | Black | X | — | 1376807-2 | 1376807-1 | | | | |
| 24 | Black | X | | — | — | 1971003-1 | | | |
| | Black | X | | | | 1971003-2 | | | |

## Mated Dimension



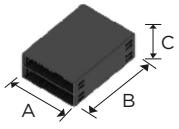

## External Dimensions

- Receptacle Assembly




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | X | Black | 1-178288-6 | 38.2 | 22.8 | 7.2 |

Through-hole

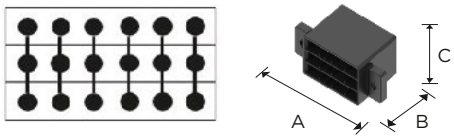



The circuit schematic is provided in the side of the product schematic above

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 24 | X | Black | 1971003-1 | 33.1 | 45.7 | 17.1 |
| | | | 1971003-2 | 35.1 | | 35.1 |

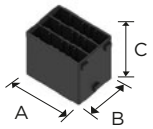
- Tab housing

Panel type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 18 | X | Gold | Black | 1376807-2 | 51.0 | 26.9 | 24.6 |

Free Hanging type

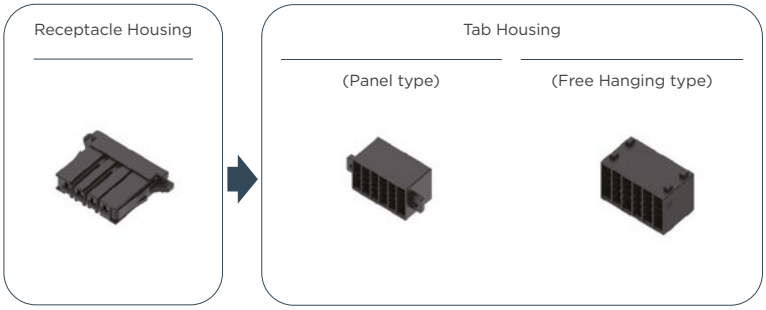



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 18 | X | Gold | Black | 1376807-1 | 33.1 | 24.6 | 26.9 |

NOTE: All products are RoHS compliant On selection.

# D-3200 Dyna-Tap 24P (4Px6ROW) – 5.08 mm pin pitch

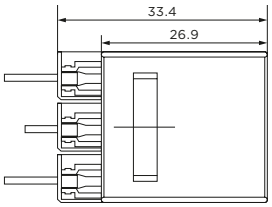
## Type Chart




| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 4 | Black | X | 1-178128-4 | — | — | — | — | — |
| 24 | Black | X | — | 1827691-2*1 | 1827691-1 | Gold | — | — |
| | Black | X | | 1-1827691-2*1 | 1-1827691-1 | Tin | | |
| | Black | X | | 1827691-3*2 | — | Gold | | |
| | Black | X | | 1-1827691-3*2 | | Tin | | |

*1 Front panel type *2 Bottom panel type

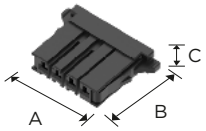
## Mated Dimension




Panel type/Free Hanging type

## External Dimensions

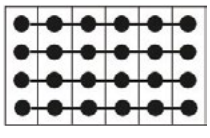
- Receptacle Housing

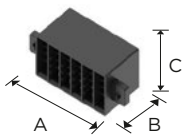



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | X | Black | 1-178128-4 | 24.6 | 22.8 | 7.2 |

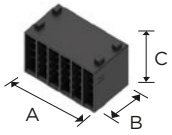
- Board-Mounting Header

Panel type






| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 24 | X | Gold | Black | 1827691-2 | 65.0 | 26.9 | 29.2 |
| | X | Tin | Black | 1-1827691-2 | | | |
| | X | Gold | Black | 1827691-3 | | | |
| | X | Tin | Black | 1-1827691-3 | | | |

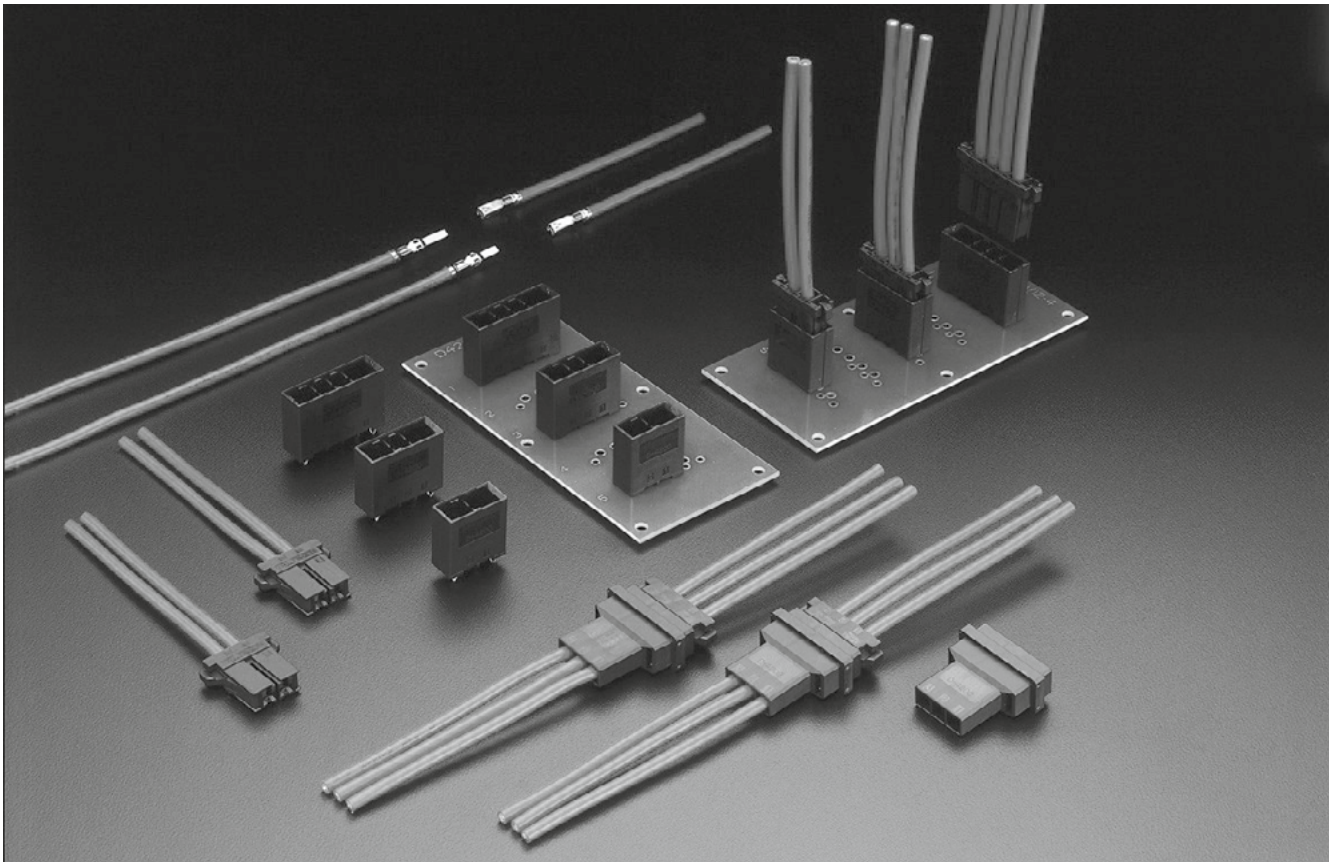



Free Hanging type

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 24 | X | Gold | Black | 1827691-1 | 47.5 | 26.9 | 29.2 |
| | | Tin | Black | 1-1827691-1 | | | |

NOTE: All products are RoHS compliant On selection.

# D-4000 Series



## Series introduction

It is a connector most appropriate for industrial equipment equipped with 20A power cords. The optimum size meets the compactness and high current requirements of the equipment.

The terminal is newly designed to have 4 contact points.

Compared with the Dynamic3000 series, it can ensure a current of above 50% while only increase 14% in mated height, so that miniaturization is achieved. Compared to existing products, each positions has a current capacity increased by about 32%.

## Product Features

**1. Small Size/High Current Contact**
The contacts are newly-designed with 4 points of contact. This allows significantly improved current capacity (rated 20A maximum) as well as reliability.

**2. The sequential contacts**
The sequential contact is a longer tab contact. When used in connection with the regular contacts it provides a ground that mates before the other power contacts.

**3. High current contact**
New V shape contact were developed for mounting on boards with larger contact area while smaller though-holes. Even though a lot of on-board connection space is needed, through-holes were made as small as possible to make pattern design easily.

**4. Audible Latching**
On mating, an audible lock sound and sensation is transmitted to the assembler, so that even when working 'blind' mis-mating (or half-mating) problems are avoided.

**5. Key**
The housing has a keying (slit), so that by separating use of the X key and Y key mis-Mating is prevented.

# D-4000 Series Performance and Specifications

## Performance

| Item \ Pitch | 250mils 6.35mm |
|---|---|
| Rated Voltage | 600V AC(rms)/DC |
| Rated Current | 2P: 24A3P: 23A4P: 22A(AWG#12 for use as powersource) |
| Contact Resistance | 10mΩ max |
| Withstanding Voltage | 2,500V AC(1 min) |
| Operating Temperature | -55°C ~+105°C |

## Positions / Wire size / Rated current

Unit: A(Amps)

| Position | Wire Size(AWG) | | |
|---|---|---|---|
| | 12 | 14 | 16 |
| 2 | 24 | 21 | 16 |
| 3 | 23 | 20 | 15 |
| 4 | 22 | 19 | 14 |

## Product Specifications

| | | |
|---|---|---|
| Product Specifications | | 108-78182 |
| Applications Specifications | | 114-5369 |
| Hand tool application specification | Part number: 1762130-1 (M) | 411-78174 |
| | Part number: 1762129-1 (L) | 411-78173 |
| Unplugging tool (1762461-1) operating manual | | 411-78186 |

When applicable, please be sure to order the operating manual.
It can also be found in the online electronic specifications catalog.

## Materials and Plating

| Category | Materials | Plating |
|---|---|---|
| Receptacle Con-tactTab Contact | Phosphor bronze or copper alloy | 0.38μm gold-plating over Nickel under- plated |
| Board Mount Header | Phosphor bronze or copper alloy | Gold plating over Nickel under-plated Tin plating on tail side |
| Housing | UL94V-0, reinforced thermoplastic PBT with glass fiber | |

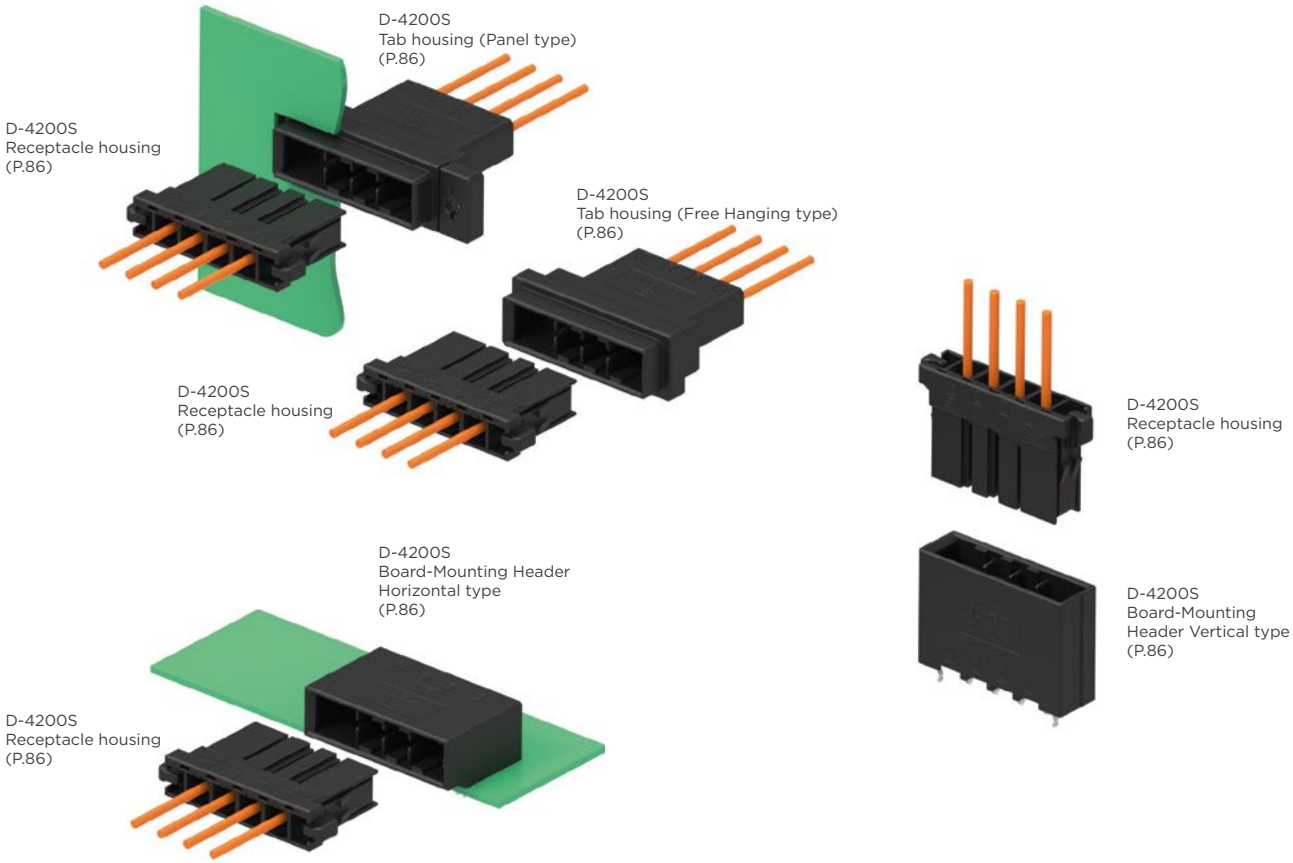
## Safety Standards

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

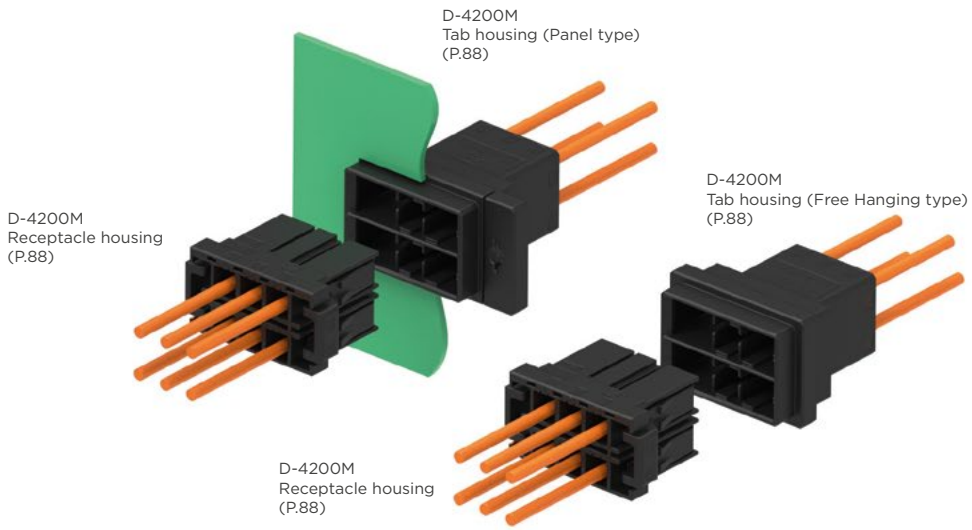
| Standard \ Series | D-4200 | | |
|---|---|---|---|
| | Rated Voltage | Rated Current | Temperature Range |
| Product Specifications 108-78182 | 600V AC/DC | 24A AWG#12 2P | -55°C ~+105°C |
| UL File No.E28476 | Based on the requirements of Application | Based on the requirements of Application | — |
| TÜV License No. R 50084673 | 600V AC/DC | AWG / A(2 P): 12 / 24; 14 / 21; 16 / 16 | -55°C ~+105°C |

# D-4000 Series Configurations

## D-4200S
High Current




## D-4200M
High Current Modular Type



# D-4000 Series Contact

## Crimped Types

(Gold plating thickness 0.38 µm)



Receptacle Contact
(Used in Receptacle housing)



Tab contact
(Used in Tab housing)

| Wire Range | | Outside Diameter of Insulation mm | Wire Range Mark | Contacts | | | | | | Applicable tools | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptacle Contact | | Tab Contact | | Sequential LongTab contacts | | Hand tool CCII hand tool PEW12 hand tool* PEW12 dice only | Mini-Applicator |
| AWG | mm² | | | Strip form | Loose Piece | Strip form | Loose Piece | Strip form | Loose Piece | | |
| 22 | 0.30 | 1.58-2.38 | SS* | 2287721-2 | 2288020-1 | 2287732-2 | 2288019-1 | 1-2287732-2 | 1-2288019-1 | — | — |
| 20 | 0.50 | 1.76-2.56 | | | | | | | | | |
| 20 | 0.50 | 1.8-2.7 | S | 2040015-2 | 2040587-1 | 2040016-2 | 2040586-1 | 1-2040016-1 | 1-2040586-1 | 2266289-1 | 2047670-1 |
| 18 | 0.85 | | | | | | | | | | |
| 16 | 1.42 | 2.4-3.2 | | | | | | | | | |
| 16 | 1.25 | 2.0-3.2 | M | 1747418-2 | 1747499-2 | 1747419-2 | 1747501-2 | 1-1747419-2 | 1-1747501-2 | 1762130-1 | 1762120-2 |
| 14 | 2.20 | 2.8-3.75 | | | | | | | | 1762671-1* (1762675-1) | |
| 14 | 2.20 | 2.9-3.8 | L | 1747415-2 | 1747498-2 | 1747416-2 | 1747500-2 | 1-1747416-2 | 1-1747500-2 | 1762129-1 | 1762119-2 |
| 12 | 3.50 | 3.8-4.2 | | | | | | | | 1762670-1* (1762674-1) | |

Note: *Corresponding terminal's gold plating thickness is 0.76 µm, and that of the corresponding terminal without wire diameter and type is 0.38 µm.

Please contact our sales department or distributor for more information.

Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

PEW 12 is an exchange-type hand tool. *refers to the exchange-type hand tool with product number – 9-1478240-0

The receptacle contact can be used in all receptacle housings, the tab contact can be used in all tab housings. Details of the applicable tool are available from P.106-110.

NOTE: All products are RoHS compliant On selection.

# D-4200S Single-row High Voltage – 6.35mm pin pitch

## Type Chart



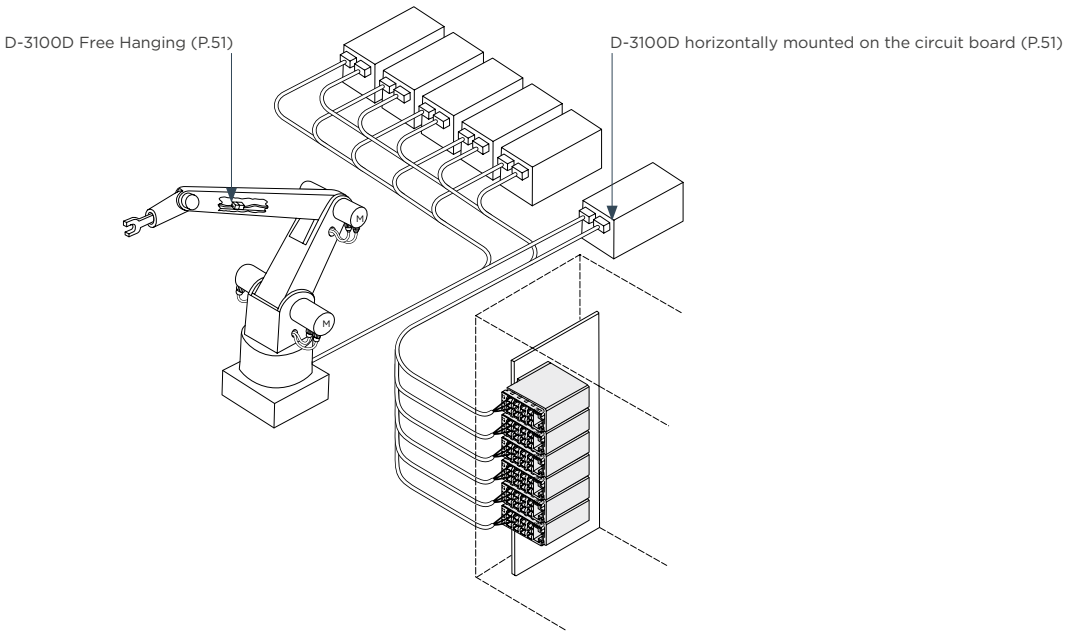

| Pos | Color | Key | Receptacle housing | Tab housing | | Pla-ting | Board-Mounting Header | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Horizontal type | | Vertical type | |
| | | | | Panel type | Free Hangingtype | | Standard | Sequential | Standard | Sequential |
| 2 | Black | X | 1-1747276-2 | 1-1747535-2 | 1-1747414-2 | Gold | 1-1903328-2 | — | 1-1747277-2 | — |
| | Black | Y | 2-1747276-2 | 2-1747535-2 | 2-1747414-2 | Gold | 2-1903328-2 | — | 2-1747277-2 | — |
| 3 | Black | X | 1-1747276-3 | 1-1747535-3 | 1-1747414-3 | Gold | 1-1903328-3 | 5-1903328-3 | 1-1747277-3 | 5-1747277-3 |
| | Black | Y | 2-1747276-3 | 2-1747535-3 | 2-1747414-3 | Gold | 2-1903328-3 | 6-1903328-3 | 2-1747277-3 | 6-1747277-3 |
| 4 | Black | X | 1-1747276-4 | 1-1747535-4 | 1-1747414-4 | Gold | 1-1903328-4 | 5-1903328-4 | 1-1747277-4 | 5-1747277-4 |
| | Black | Y | 2-1747276-4 | 2-1747535-4 | 2-1747414-4 | Gold | 2-1903328-4 | 6-1903328-4 | 2-1747277-4 | 6-1747277-4 |

## Relative Product Information

Applicable contact...P.85
Performance & Specifications...P.83

## Applications

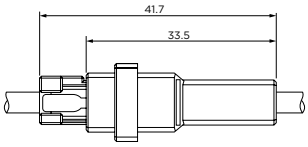
- Example of Robot/Robot Controller Application



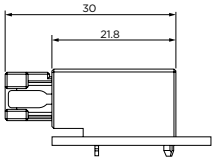

NOTE: All products are RoHS compliant On selection.

# D-4200S Single-row High Voltage – 6.35mm pin pitch

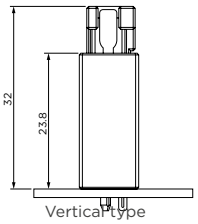
## Mated Dimension




Panel type/Free Hanging type



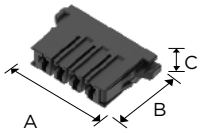

Horizontal type




Vertical type

## External Dimensions

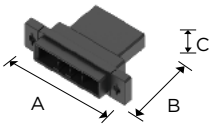
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-1747276-2 | 27.4 | 23.0 | 8.5 |
| | Y | Black | 2-1747276-2 | | | |
| 3 | X | Black | 1-1747276-3 | 33.7 | | |
| | Y | Black | 2-1747276-3 | | | |
| 4 | X | Black | 1-1747276-4 | 40.1 | | |
| | Y | Black | 2-1747276-4 | | | |

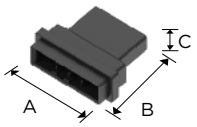
- Tab Housing

Panel type



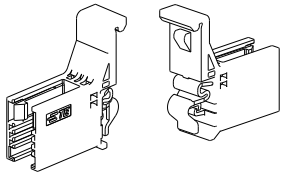

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-1747535-2 | 40.0 | 33.5 | 13.8 |
| | Y | Black | 2-1747535-2 | | | |
| 3 | X | Black | 1-1747535-3 | 46.0 | | |
| | Y | Black | 2-1747535-3 | | | |
| 4 | X | Black | 1-1747535-4 | 53.0 | | |
| | Y | Black | 2-1747535-4 | | | |

Free Hanging type



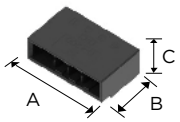

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-1747535-2 | 40.0 | 33.5 | 13.8 |
| | Y | Black | 2-1747535-2 | | | |
| 3 | X | Black | 1-1747535-3 | 46.0 | | |
| | Y | Black | 2-1747535-3 | | | |
| 4 | X | Black | *1-1747535-4 | 53.0 | | |
| | Y | Black | *2-1747535-4 | | | |

*DIN rail attachment is available. P/N : 2822901-1
Applicable P/N : Δ-1747414-4



- Board-Mounting Header

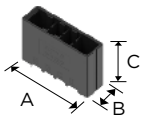
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-1903328-2 | 22.4 | 21.8 | 11.9 |
| | Y | Gold | Black | 2-1903328-2 | | | |
| 3 | X | Gold | Black | 1-1903328-3 | 28.7 | | |
| | Y | Gold | Black | 2-1903328-3 | | | |
| | X | Gold | Black | 5-1903328-3*1 | | | |
| | Y | Gold | Black | 6-1903328-3*1 | | | |
| 4 | X | Gold | Black | 1-1903328-4 | 35.1 | | |
| | Y | Gold | Black | 2-1903328-4 | | | |
| | X | Gold | Black | 5-1903328-4*1 | | | |
| | Y | Gold | Black | 6-1903328-4*1 | | | |

*1 Sequential

Vertical type

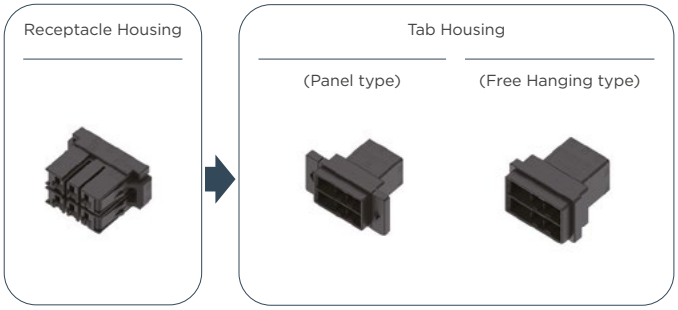



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-1747277-2 | 22.4 | 10.4 | 23.8 |
| | Y | Gold | Black | 2-1747277-2 | | | |
| 3 | X | Gold | Black | 1-1747277-3 | 28.7 | | |
| | Y | Gold | Black | 2-1747277-3 | | | |
| | X | Gold | Black | 5-1747277-3*1 | | | |
| | Y | Gold | Black | 6-1747277-3*1 | | | |
| 4 | X | Gold | Black | 1-1747277-4 | 35.1 | | |
| | Y | Gold | Black | 2-1747277-4 | | | |
| | X | Gold | Black | 5-1747277-4*1 | | | |
| | Y | Gold | Black | 6-1747277-4*1 | | | |

*1 Sequential

# D-4200M Double-row High Current Modular Type – 6.35mm pin pitch

## Type Chart

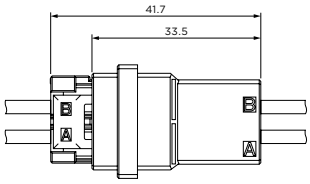



| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 6 | Black | XX | 1-1903329-3 | 1-1903331-3 | 1-1903330-3 | — | — | — |
| | Black | YY | 2-1903329-3 | 2-1903331-3 | 2-1903330-3 | | | |
| | Black | XY | 3-1903329-3 | 3-1903331-3 | 3-1903330-3 | | | |
| 8 | Black | XX | 1-2390394-4 | 1-2390395-4 | — | | | |

## Relative Product Information

Applicable contact...P.85
Performance & Specifications...P.83

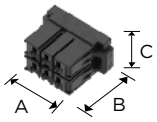
## Mated Dimension




Panel type/Free Hanging type

## External Dimensions

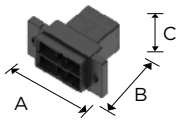
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-1903329-3 | 33.7 | 23.0 | 17.3 |
| | YY | Black | 2-1903329-3 | | | |
| | XY | Black | 3-1903329-3 | | | |
| 8 | XX | Black | 1-2390394-4 | 40.1 | 23.0 | |

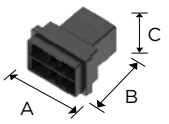
- Tab housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-1903331-3 | 46.0 | 33.5 | 22.6 |
| | YY | Black | 2-1903331-3 | | | |
| | XY | Black | 3-1903331-3 | | | |
| 8 | XX | Black | 1-2390395-4 | 52.4 | | |

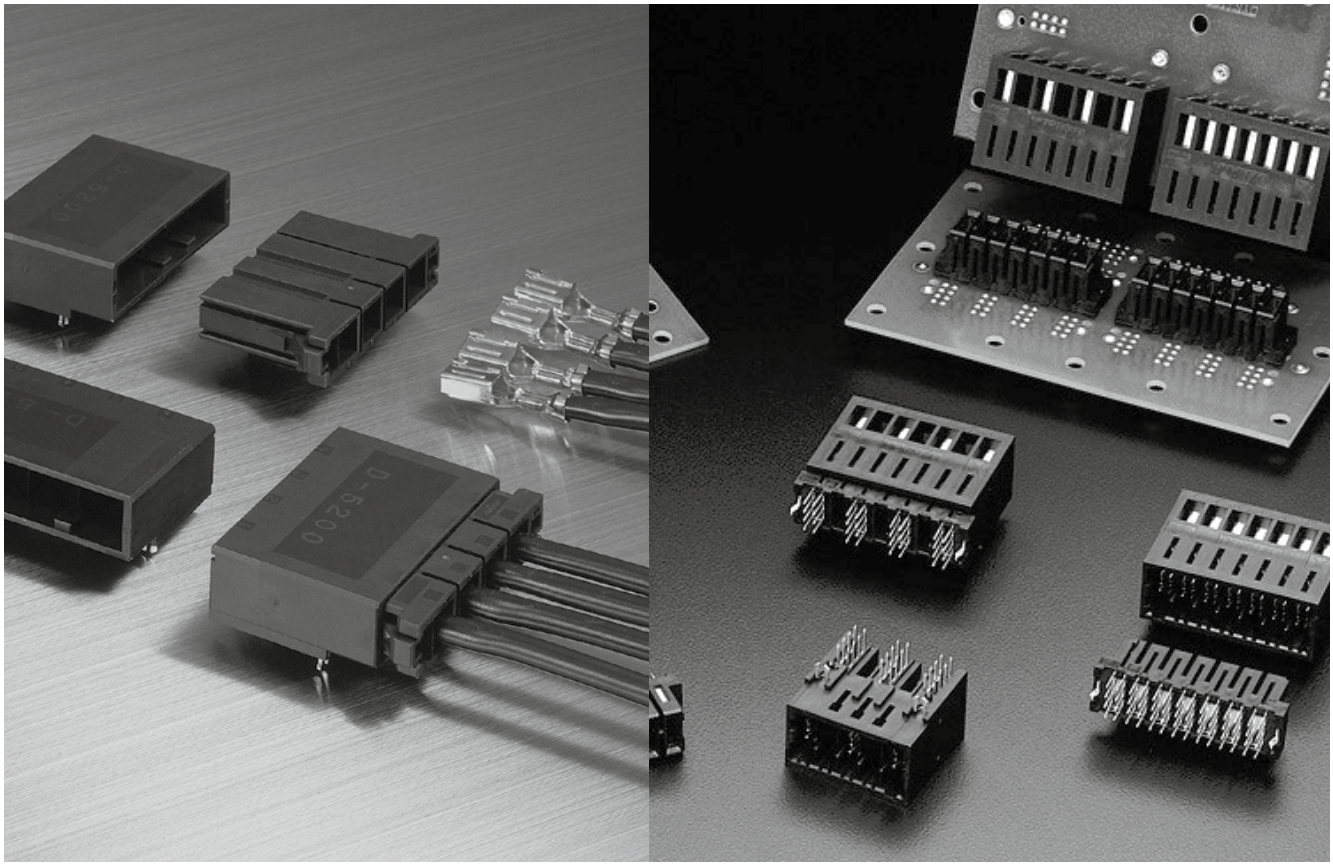
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 6 | XX | Black | 1-1903330-3 | 32.7 | 33.5 | 22.6 |
| | YY | | 2-1903330-3 | | | |
| | XY | | 3-1903330-3 | | | |

NOTE: All products are RoHS compliant On selection.

# D-5000 Series



## Series introduction

The Dynamic 5000 series was developed for up to 45 amperes in response to the demand for improved reliability and productivity for the main power lines in equipment.

They can be used for a variety of applications as replacements for terminal blocks, or round terminals. It is compact but with a high current capacity.

In addition, it has a wide variety of housings to cover all applications from PCB connections to internal wiring distribution.

The D-5000 series can be used for high current power line applications where reliability really matters.

## Product Features

**1. High Current Contact**
The D-5000 series uses the same 'twis- resistant, box shape contact' as the rest of the Dynamic series contacts. The material is the same copper alloy developed for the D-3000 series with its superior elasticity and conducivity, which results in a reliable, robust contact capable of high current. Silver plated versions of the D-5000α series, which support higher currents, are also available. The terminals can be selected according to use.

**2. Sequential Connection**
The Sequential Mating means that the build up of static charge in the sequential contact is grounded first at mating. The long tab was developed for sequential connection of tab contacts. By using both this long tab contact and standard tab contacts, sequential connectibility is enhanced.

**3. Contact for High Amperage**
The contact for on-board mounting are a newly developed twin-lead type. It is possible to reliably join patterns and connectors because a wide area of PCBs can be allocated. New V shape contacts were developed for mounting on boards. Even though a lot of on-board connection space is needed, through-holes were made as small as possible to make pattern design easily (patent pending).

**4. IP20 (Protection from the approach of the finger)**
D-5300 is recomended for applications with a supply side in the IP20 apparatus. By using a housing on the apparatus side (panel side) which can accommodate the receptacle contact, the apparatus side connector meets IP20 requirement..

# D-5000 Series Performance and Specifications

## Performance

| Item | D-5200 | D-5300 | D-5200α |
|---|---|---|---|
| Pitch | 10.16mm | | |
| Rated Voltage | 630V AC / DC | | |
| Withstanding Voltage | 3000 VAC | | |
| Total resistance | 2mΩ max | | |
| Insertion strength: | 9.8N max (per position) | | |
| Withdrawal strength | 1.96N min (per position) | | |
| Durability | 50 cycles (0.76 μm Gold) | | |
| Locking strength | 98N min | | |

## Product Specifications

| Product Specifications | | 108-5453 |
|---|---|---|
| Test Report | | 501-5188 |
| Applications Specifications | | 114-5206 |
| Hand tool manual | Part number: 234170-1 | 411-5712 |
| | Part number: 234171-1 | 411-5713 |
| | Part number: 91596-1 | 408-8547-1 |
| | Part number: 1366044-1 | 411-5976 |
| Unplugging tool (model: 409158-1) operation manual | | 411-5774 |

When applicable, please be sure to order the operating manuals.
It can also be found in the online electronic specifications catalog.

## Material and Plating

| Category | Item | D-5200 | D-5300 | D-5200α |
|---|---|---|---|---|
| Receptacle Contacts Tab Contact | Materials | Copper alloys | | |
| | Plating | Gold Plating with Nickel under-plated | Gold/Silver Plating with Nickel under--plated | Gold Plating with Nickel under-plated |
| Board Mount Header | Materials | Copper alloys | — | Copper alloy |
| | Plating | Gold Plating with Nickel under-plated | — | Gold Plating with Nickel under-plated |
| Housing | Materials | UL94V-0, glass fiber reinforced thermoplastic PBT | | |

## Positions / Wire size / Rated current

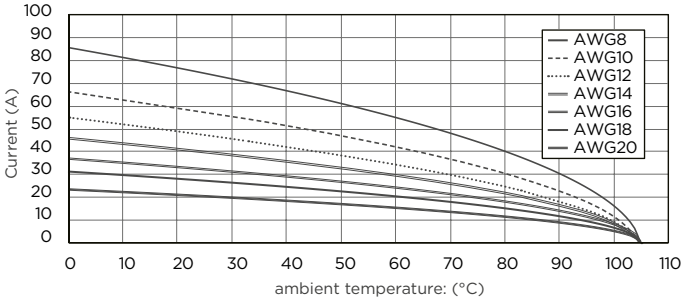
ambient temperature: 25°C, temperature rise: 80°C

| Series (Gold Plating) | Pos | Rated Current (A) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | AWG 8 | AWG 10 | AWG 12 | AWG 14 | AWG 16 | AWG 18 | AWG 20 |
| D-5200 | 2 | 60 | 48 | 40 | 32 | 25 | 22 | 17 |
| | 3 | 58 | 48 | 38 | 30 | 25 | 19 | 15 |
| | 4 | 53 | 48 | 36 | 28 | 24 | 19 | 15 |
| | 6 | 50 | 41 | 35 | 27 | 22 | 17 | 14 |
| | 8 | 48 | 39 | 33 | 25 | 21 | 16 | 14 |
| D-5300 | 3 | 51 | 43 | 38 | 30 | 24 | 17 | 14 |
| | 4 | 49 | 43 | 36 | 30 | 24 | 18 | 14 |
| D-5200α | 3 | - | - | - | - | - | - | - |
| | 4 | 51 | 46 | 41 | 34 | 29 | 23 | 21 |

| Series (Silver Plating) | Type | Pos | Rated Current (A) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | AWG 8 | AWG 10 | AWG 12 | AWG 14 | AWG 16 | AWG 18 | AWG 20 |
| D-5200 | wire to board | 4 | 63 | 56 | 43 | 34 | 29 | 23 | 18 |
| | wire to wire | 2 | 74 | 57 | 48 | 39 | 32 | 26 | 20 |
| | | 3 | 69 | 56 | 46 | 36 | 32 | 22 | 18 |
| | | 4 | 67 | 55 | 44 | 37 | 27 | 23 | 18 |
| | | 6 | 57 | 46 | 35 | 31 | 26 | 19 | 16 |
| D-5300 | wire to wire | 3 | 59 | 47 | 41 | 30 | 24 | 19 | 15 |
| | | 4 | 56 | 47 | 36 | 30 | 25 | 19 | 15 |
| D-5200α | wire to board | 3 | - | - | - | - | - | - | - |
| | | 4 | 63 | 50 | 41 | 34 | 28 | 22 | 19 |

D-5200 2pos, silver plating, wire to wire.

Temperature rise curve



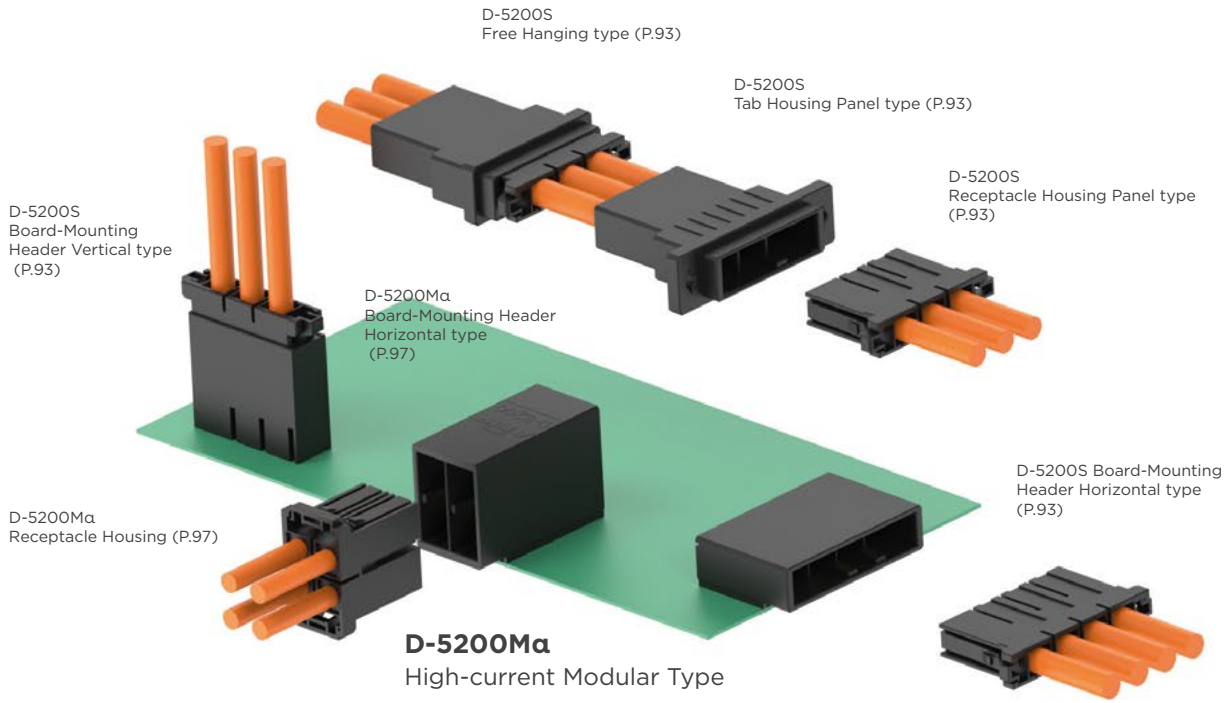

## Safety Standards

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications

| Series STD. | D-5200Series(10.16mmPitch) | | | D-5200Mα Series | | |
|---|---|---|---|---|---|---|
| | Rated Voltage | Rated Current | Temperature Range | Rated Voltage | Rated Current | Temperature Range |
| Product Specifications 108-5453 | 630V AC/DC | (As shown above) | -55°C-+105°C | 630V AC/DC | (As shown above) | -55°C-+105°C |
| UL File No.E28476 (Recognized Component) | Based on the require-ments of application | Based on the require-ments of application | — | — | Based on the require-ments of application | — |
| CSA Report No. LR 7189 | 600V AC/DC | AWG / A: 16 / 13; 14 / 18; 12 / 25; 10 / 30 | — | — | — | — |
| TÜV License No. R9650368 IP protection level IP-10 Overvoltage type (II) 50 cycles of repeated plugging and unplugging | 600V AC/DC | AWG / A: 16 / 15; 14 / 20; 12 / 25; 10 / 30 | -30°C-+105°C | — | AWG / A (1–13P / 4-No of Pos.): 20 / 12.5 / 12.5; 18 / 17.5 / 16; 16 / 21 / 19.5; 14 / 26 / 24; 12 / 33 / 31; 10 / 40 / 37.5; 8 / 48 / 46 | -30°C-+105°C |

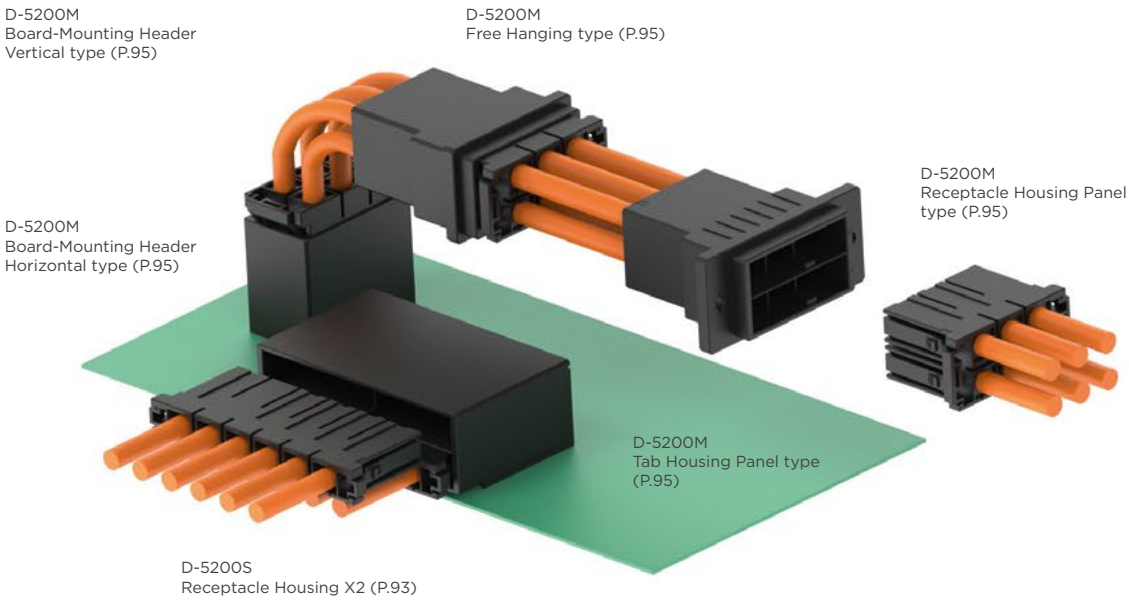
# D-5000 Series Configurations

## D-5200S
Single-row High Voltage Type




## D-5200Mα
High-current Modular Type

## D-5200M
High-voltage Modular Type



# D-5000 Series Contact

## Crimped Types



Receptacle Contact
(Used in Receptacle housing)



Tab contact
(Used in Tab housing)

| Applicable Wire Range | | Outside Diameter of Insula-tion mm | Wire Range Mark | Contacts | | | | | | Applicable tools | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptacle Contact | | Tab Contact | | Long sequentialcontacts | | Manual Hand Tools | Electric Hy-draulicTool*1 | Mold*2 | Mini- Applica-tion Tool |
| AWG | mm² | | | Strip form | LoosePiece | Strip form | LoosePiece | Strip form | LoosePiece | | | | |
| 20 | 0.50 | 1.8-2.83 | SS | 1318985-Δ | 1318986-Δ | — | — | — | — | 91596-1 | — | — | *1 |
| 16 | 1.25 | 2.35-3.23 | | | | | | | | | | | |
| 16 | 1.25 | 3-3.80 | S | 179955-Δ | 316040-Δ | 917802-Δ | 917804-Δ | 84696-1 | 2013594-1 | 234170-1 | 2155369-1 | 2155822-1 | 2266273-2 |
| 14 | 2.20 | | | | | | | | | | | | |
| 12 | 3.50 | 4-5.2 | M | 179956-Δ | 316041-Δ | 917803-Δ | 917805-Δ | 84695-1 | 2013593-1 | 234171-1 | | 2155503-1 | 2151086-2 |
| 10 | 5.50 | | | | | | | | | | | | |
| 8 | 8.00 | 4.9-7.8 | L | 1318696-Δ | 1318697-Δ | 1981690-Δ<br>1747388-6 | 1981691-Δ | 2174021-1 | 2174022-1 | 1366044-1 | | 2155502-1 | 2266274-2 |

Note Plating code
-2: Gold plating of 0.38 µm in thickness
-6: Silver plating of 2.54 µm in thickness
-3: Gold plating of 0.76 µm in thickness
-1: Gold plating of 0.2 µm in thickness

Please contact our sales department or distributor for more information.

Please contact the sales department for mini applications tools.
Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

*1 See P.123.
If you have any questions, please contact the AT tooling sales department.

*2 Used together with the electric hydraulic tool 2155369-1



D-5αSeries silver-plated type

| Wire Range | | Outside Diameter of Insulation mm | Wire Range Mark | Contacts | | | Applicable tools | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptacle Contact | | Tab Contact | Hand Tools | Electric Hydraulic Tool*5 | Dice*6 | Tool numbers |
| AWG | mm² | | | Strip form | Loose Piece | Loose Piece | | | | |
| 20 | 0.50 | 1.8-2.83 | SS | 1318985-6 | 1318986-6 | — | 91596-1 | — | — | 1366757-2<br>1528106-2 |
| 16 | 1.25 | 2.35-3.23 | | | | | | | | |
| 16 | 1.25 | 3-3.80 | S | 179955-6 | 316040-6 | 917804-6 | 234170-1 | 2155369-1 | 2155822-1 | 1366659-2<br>1426229-2*1 |
| 14 | 2.20 | | | | | | | | | |
| 12 | 3.50 | 4-5.2 | M | 179956-6 | 316041-6 | 917805-6 | 234171-1 | | 2155503-1 | 1366660-2*2<br>2151086-2*3 |
| 10 | 5.50 | | | | | | | | | |
| 8 | 8.00 | 4.9-7.8 | L | 1318696-6 | 1318697-6 | 1747443-6 | 1366044-1 | | 2155502-1 | 1366658-3<br>1426325-2*4 |

Note: The model with its name including "-6" has a silver plating of 2.54 µm in thickness.

For details, please contact the purchase agent or sales department.

Please contact the sales department for mini application tools.
Strip Form contacts are used with Mini-applicators (bench machine) and Loose-Piece contacts are with hand tools.

*1 Applicable contact:179955-Δ

*2 Applicable contact:179956-Δ 917803-Δ 84695-Δ

*3 Applicable contact:179956-Δ 917803-Δ

*4 Applicable contact:1318696-Δ

*5 See P.121
If you have any questions, please contact the AT tooling sales department.

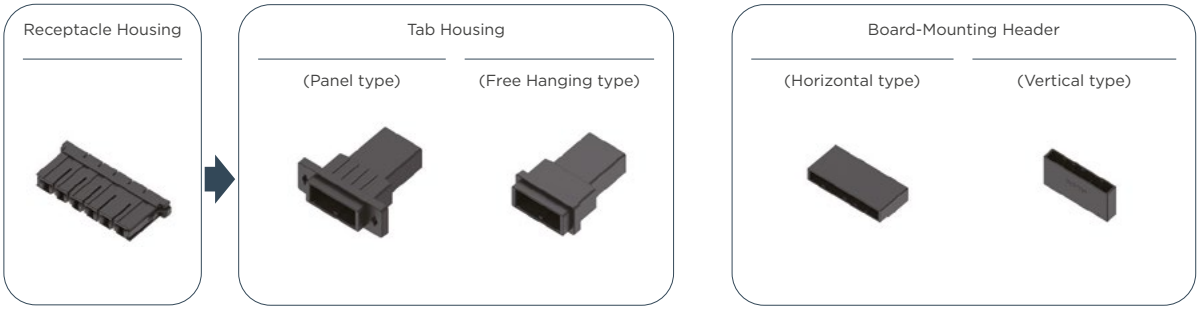
*6 Used together with the electric hydraulic tool 2155369-1

The receptacle contact can be used in all receptacle housings, the tab contact can be used in all tab housings.

NOTE: All products are RoHS compliant On selection.

# D-5200S Single-Row High Current Type – 10.16mm pin pitch

## Type Chart

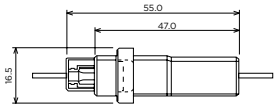



| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hangingtype | | Horizontal type | | Vertical type | |
| | | | | | | | Standard | Sequential | Standard | Sequential |
| 2 | Black | X | 1-179958-2 | 1-353047-2 | 1-353046-2 | Gold | 1-353079-2 | — | 1-353080-2 | — |
| | Black | | | | | Gold | 1-353079-3 | | 1-353080-3 | |
| | Black | | | | | Gold | — | | 6-353080-2 | |
| | Black | Y | 2-179958-2 | 2-353047-2 | 2-353046-2 | Gold | | | 2-353080-2 | |
| | Black | | | | | Gold | | | 2-353080-3 | |
| 3 | Black | X | 1-179958-3 | 1-353047-3 | 1-353046-3 | Gold | 1-353081-2 | 8-353081-2 | 1-353082-2 | 8-353082-2 |
| | Black | | | | | Gold | 1-353081-3 | — | 1-353082-3 | — |
| | Black | | | | | Gold | — | | — | |
| | Black | Y | 2-179958-3 | 2-353047-3 | 2-353046-3 | Gold | 2-353081-2 | | 2-353082-2 | |
| | Black | | | | | Gold | 2-353081-3 | | 2-353082-3 | |
| 4 | Black | X | 1-179958-4 | 4P or 6P Wire-to-wire connectors are available in D5200M, see P.93 | | Gold | 1-917541-2 | 8-917541-2 | 1-917542-2 | 8-917542-2 |
| | Black | | | | | Gold | 1-917541-3 | — | 1-917542-3 | — |
| | Black | Y | 2-179958-4 | | | Gold | 2-917541-2 | | 2-917542-2 | — |
| | Black | | | | | Gold | — | | 2-917542-3 | |
| 6 | Black | X | 1-179958-6 | | | Gold | 1-179959-2 | | 1-179960-2 | |
| | Black | | | | | Gold | 1-179959-3 | | 1-179960-3 | |
| | Black | | | | | Gold | — | | 6-179960-2 | |
| | Black | Y | 2-179958-6 | | | Gold | 2-179959-2 | | 2-179960-2 | |
| | Black | | | | | Gold | 2-179959-3 | | 2-179960-3 | |
| | Black | | | | | Gold | — | | 7-179960-2 | |

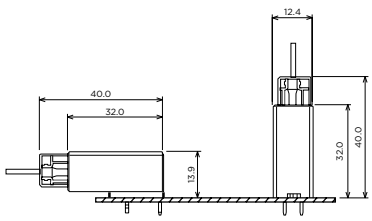
## Relative Product Information

Applicable contact...P.92
Performance & Specifications...P.90

## Mated Dimension




Panel type/Free Hanging type



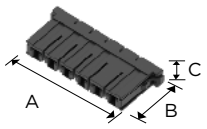

Horizontal type/Vertical type

NOTE: All products are RoHS compliant On selection.

# D-5200S Single-Row High Current Type – 10.16mm pin pitch

## External Dimensions

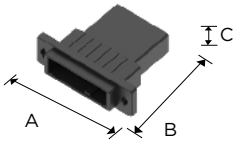
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-179958-2 | 35.8 | 29.0 | 9.8 |
| | Y | Black | 2-179958-2 | | | |
| 3 | X | Black | 1-179958-3 | 46.0 | | |
| | Y | Black | 2-179958-3 | | | |
| 4 | X | Black | 1-179958-4 | 53.7 | | |
| | Y | Black | 2-179958-4 | | | |
| 6 | X | Black | 1-179958-6 | 74.0 | | |
| | Y | Black | 2-179958-6 | | | |

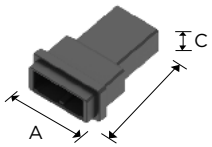
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-353047-2 | 47.0 | 47.0 | 16.5 |
| | Y | Black | 2-353047-2 | | | |
| 3 | X | Black | 1-353047-3 | 57.0 | | |
| | Y | Black | 2-353047-3 | | | |

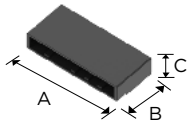
Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 2 | X | Black | 1-353047-2 | 47.0 | 47.0 | 16.5 |
| | Y | Black | 2-353047-2 | | | |
| 3 | X | Black | 1-353047-3 | 57.0 | | |
| | Y | Black | 2-353047-3 | | | |

- Board-Mounting Header

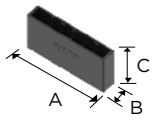
Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-353079-2 | 29.4 | 32.0 | 13.9 |
| | | Gold | Black | 1-353079-3 | | | |
| 3 | X | Gold | Black | 1-353081-2 | 39.5 | | |
| | | Gold | Black | 8-353081-2* | | | |
| | | Gold | Black | 1-353081-3 | | | |
| | Y | Gold | Black | 2-353081-2 | | | |
| | | Gold | Black | 2-353081-3 | | | |
| 4 | X | Gold | Black | 1-917541-2 | 49.7 | | |
| | | Gold | Black | 8-917541-2* | | | |
| | | Gold | Black | 1-917541-3 | | | |
| | Y | Gold | Black | 2-917541-2 | | | |
| 6 | X | Gold | Black | 1-179959-2 | 70.0 | | |
| | | Gold | Black | 1-179959-3 | | | |
| | Y | Gold | Black | 2-179959-2 | | | |
| | | Gold | Black | 2-179959-3 | | | |

* 1 Sequential

Vertical type



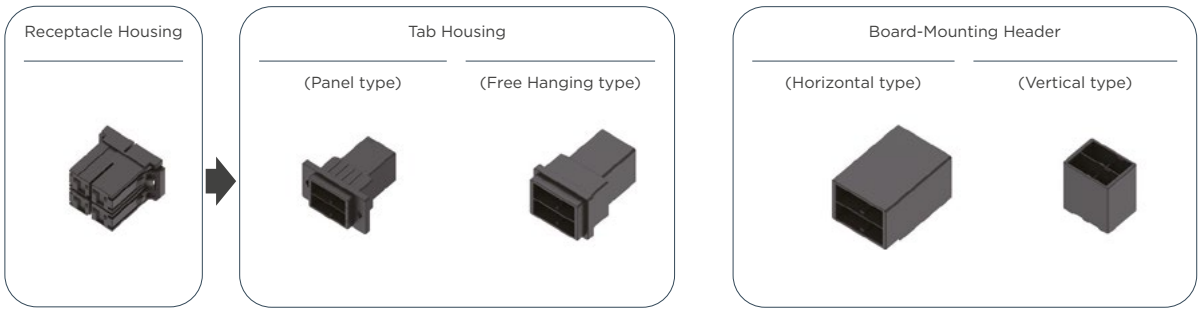

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | Gold | Black | 1-353080-2 | 29.4 | 12.4 | 32.0 |
| | | Gold | Black | 1-353080-3 | | | |
| | | Gold | Black | 6-353080-2 | | | |
| | Y | Gold | Black | 2-353080-2 | | | |
| | | Gold | Black | 2-353080-3 | | | |
| 3 | X | Gold | Black | 1-353082-2 | 39.5 | | |
| | | Gold | Black | 8-353082-2* | | | |
| | | Gold | Black | 1-353082-3 | | | |
| | Y | Gold | Black | 2-353082-2 | | | |
| | | Gold | Black | 2-353082-3 | | | |
| 4 | X | Gold | Black | 1-917542-2 | 49.7 | | |
| | | Gold | Black | 8-917542-2* | | | |
| | | Gold | Black | 1-917542-3 | | | |
| | Y | Gold | Black | 2-917542-2 | | | |
| | | Gold | Black | 2-917542-3 | | | |
| 6 | X | Gold | Black | 1-179960-2 | 70.0 | | |
| | | Gold | Black | 1-179960-3 | | | |
| | | Gold | Black | 6-179960-2 | | | |
| | Y | Gold | Black | 2-179960-2 | | | |
| | | Gold | Black | 2-179960-3 | | | |
| | | Gold | Black | 7-179960-2 | | | |

* 1 Sequential

NOTE: All products are RoHS compliant On selection.

# D-5200M Double-row High Current Modular Type – 10.16mm pin pitch

## Type Chart



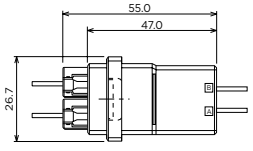

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hangingtype | | Horizontal type | | Vertical type | |
| | | | | | | | Standard | Sequential | Standard | Sequential |
| 4 | Black | XX | 1-917807-2 | 1-917809-2 | 1-917808-2 | Gold/Silver | 1-1123309-2 | 8-1123309-2 | 1-1981458-6 | — |
| | Black | XX | 2-917807-2 | 2-917809-2 | 2-917808-2 | Gold/Silver | 2-1123309-2 | — | 2-1981458-6 | |
| | Black | XX | 3-917807-2 | 3-917809-2 | 3-917808-2 | Gold/Silver | 3-1123309-2 | | 3-1981458-6 | |
| 6 | Black | XX | 1-917807-3 | 1-917809-3 | 1-917808-3 | — | — | — | 1-2326092-2 | |
| | Black | XX | 2-917807-3 | 2-917809-3 | 2-917808-3 | | | | 2-2326092-2 | |
| | Black | XX | 3-917807-3 | 3-917809-3 | 3-917808-3 | | | | 3-2326092-2 | |
| 8 | Black | XX | —*1 | — | — | Gold | 1123829-1 | | — | |
| | Black | XX | — | | | — | — | | | |

* 1: Use two 1-179958-4

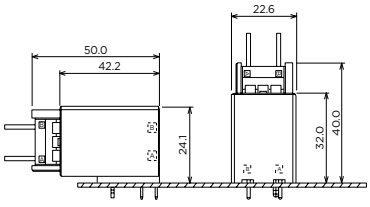
## Relative Product Information

Applicable contact...P.92
Performance & Specifications...P.90

## Mated Dimension




Panel type/Free Hanging type



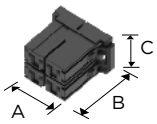

Horizontal type Vertical type

NOTE: All products are RoHS compliant On selection.

# D-5200M Double-row High Current Modular Type – 10.16mm pin pitch

## External Dimensions

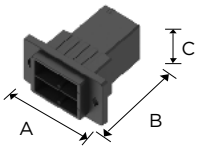
- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | XX | Black | 1-917807-2 | 33.4 | 29.0 | 20.0 |
| | YY | | 2-917807-2 | | | |
| | XY | | 3-917807-2 | | | |
| 6 | XX | | 1-917807-3 | 43.5 | | |
| | YY | | 2-917807-3 | | | |
| | XY | | 3-917807-3 | | | |

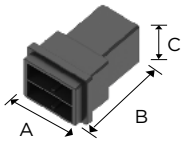
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | XX | Black | 1-917809-2 | 47.0 | 47.0 | 26.7 |
| | YY | | 2-917809-2 | | | |
| | XY | | 3-917809-2 | | | |
| 6 | XX | | 1-917809-3 | 57.0 | | |
| | YY | | 2-917809-3 | | | |
| | XY | | 3-917809-3 | | | |

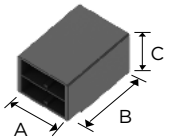
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | XX | Black | 1-917808-2 | 33.4 | 47.0 | 26.7 |
| | YY | | 2-917808-2 | | | |
| | XY | | 3-917808-2 | | | |
| 6 | XX | | 1-917808-3 | 43.6 | | |
| | YY | | 2-917808-3 | | | |
| | XY | | 3-917808-3 | | | |

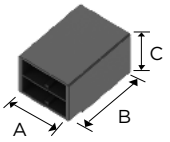
- Board-Mounting Header

Horizontal type



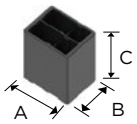

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | XX | Gold | Black | 1-1123309-2 | 29.4 | 42.2 | 24.1 |
| | YY | | | 2-1123309-2 | | | |
| | XY | | | 3-1123309-2 | | | |
| 8 | XX | | | 1123829-1 | 49.7 | 32.0 | 26.3 |

Sequential type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | XX | Gold | Black | 8-1123309-2 | 29.4 | 42.2 | 24.1 |

Vertical type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 4 | XX | Silver | Black | 1-1981458-6 | 29.4 | 22.6 | 32.0 |
| | YY | | | 2-1981458-6 | | | |
| | XY | | | 3-1981458-6 | | | |
| 6 | XX | Gold | | 1-2326092-2 | 39.5 | | 32 |
| | YY | | | 2-2326092-2 | | | |
| | XY | | | 3-2326092-2 | | | |

NOTE: All products are RoHS compliant On selection.

# D-5200Mα Double-row High Current/Voltage Modular Type – 10.16mm pin pitch

## Type Chart



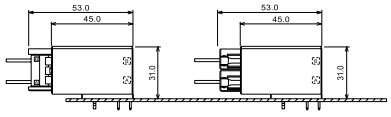

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hanging type | | Horizontal type | Vertical type |
| 2 | Black | X | 1-179958-2 | — | — | — | — | — |
| | Black | Y | 2-179958-2 | | | | | |
| 4 | Black | XX | 1-917807-2 | | | Silver | 1-1318983-6 | |
| | Black | YY | 2-917807-2 | | | Silver | 2-1318983-6 | |
| | Black | XY | 3-917807-2 | | | Silver | 3-1318983-6 | |

Note: Receptacle housing 2-pole D-5200S and 4-pole D-5200M are the same product
However, contact used is D-5a (silver plating type)

## Relative Product Information

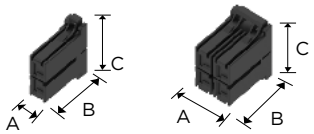
Applicable contact...P.92
Performance & Specifications...P.90

## Mated Dimension



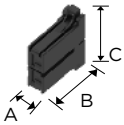

## External Dimensions

- Receptacle Housing




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 2 | X | — | Black | 1-179958-2 | 9.8 | 29.0 | 23.8 |
| | Y | — | Black | 2-179958-2 | | | |
| 4 | XX | — | Black | 1-917807-2 | 20.0 | | 33.4 |
| | YY | — | Black | 2-917807-2 | | | |
| | XY | — | Black | 3-917807-2 | | | |

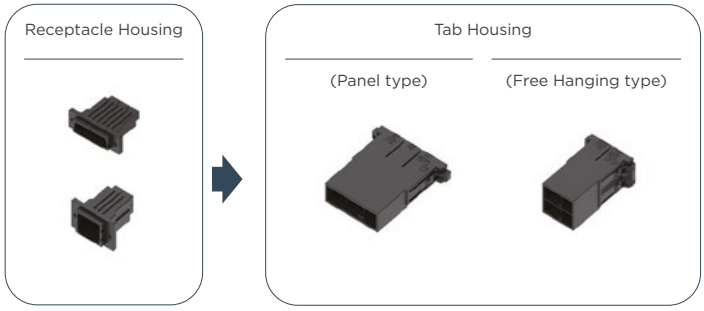
- Board-Mounting Header




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1747819-3 | 46.5 | 47.0 | 12.5 |
| | Y | Black | 2-1747819-3 | | | |
| 4 | XX | Black | 1-1747820-2 | 33.8 | | 22.6 |
| | YY | Black | 2-1747820-2 | | | |
| | XY | Black | 3-1747820-2 | | | |

# D-5300 Reversed Mounting Type – 10.16mm pin pitch

## Type Chart



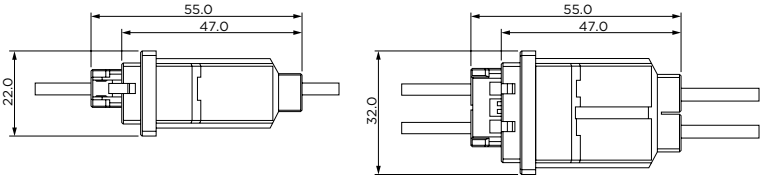

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Free Hangingtype | | Horizontal type | | Vertical type | |
| | | | | | | | Standard | Sequential | Standard | Sequen-tial |
| 4 | Black | XX | 1-917807-2 | 1-917809-2 | 1-917808-2 | Gold/ Silver | 1-1123309-2 | 8-1123309-2 | 1-1981458-6 | — |
| | Black | XX | 2-917807-2 | 2-917809-2 | 2-917808-2 | Gold/ Silver | 2-1123309-2 | | 2-1981458-6 | |
| | Black | XX | 3-917807-2 | 3-917809-2 | 3-917808-2 | Gold/ Silver | 3-1123309-2 | | 3-1981458-6 | |
| 6 | Black | XX | 1-917807-3 | 1-917809-3 | 1-917808-3 | — | — | — | 1-2326092-2 | |
| | Black | XX | 2-917807-3 | 2-917809-3 | 2-917808-3 | | | | 2-2326092-2 | |
| | Black | XX | 3-917807-3 | 3-917809-3 | 3-917808-3 | | | | 3-2326092-2 | |
| 8 | Black | XX | —*1 | — | — | Gold | 1123829-1 | | — | |
| | Black | XX | — | | | — | — | | | |

* 1: Use two 1-179958-4

## Relative Product Information

Applicable contact...P.92
Performance & Specifications...P.90

## Mated Dimension

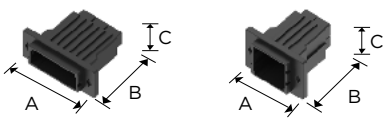



D-5300S D-5300D

## External Dimensions

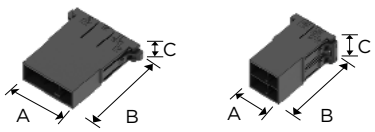
- Receptacle Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1747821-3 | 57.0 | 47.0 | 22.0 |
| | Y | Black | 2-1747821-3 | | | |
| 4 | XX | Black | 1-1747822-2 | 47.0 | | 32.0 |
| | YY | Black | 2-1747822-2 | | | |
| | XY | Black | 3-1747822-2 | | | |

- Tab Housing

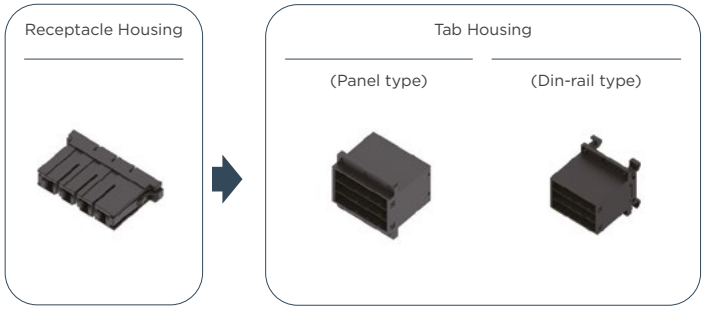



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1747819-3 | 46.5 | 47.0 | 12.5 |
| | Y | Black | 2-1747819-3 | | | |
| 4 | XX | Black | 1-1747820-2 | 33.8 | | 22.6 |
| | YY | Black | 2-1747820-2 | | | |
| | XY | Black | 3-1747820-2 | | | |

NOTE: All products are RoHS compliant On selection.

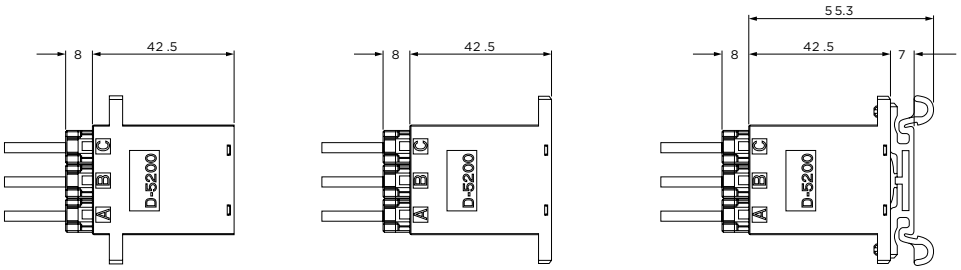
# D-5200 Dyna-Tap 12P(4Px3 Row), 20P(4Px5 Row) – 10.16mm pin pitch

## Type Chart



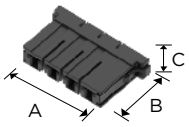

| Pos | Color | Key | Receptacle housing | Tab housing | | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|---|
| | | | | Panel type | Din-rail type | | Horizontal type | Vertical type |
| 4 | Black | — | 1-179958-4 | — | — | — | — | — |
| 12 | Black | — | — | 1903146-1*1 | 1903146-3 | Gold | — | — |
| 12 | Black | — | — | 1903146-2*2 | 1-1903146-3 | | | |
| 20 | Black | — | — | 2013285-1*1 | — | | | |
| | Black | — | — | 2013285-2*2 | 2013285-3 | | | |

* 1:Front panel type * 2:Bottom panel type




## External Dimensions

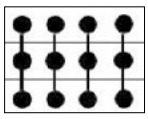
- Receptacle Housing

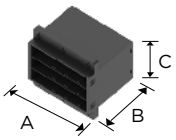



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1747821-3 | 57.0 | 47.0 | 22.0 |
| | Y | Black | 2-1747821-3 | | | |
| 4 | XX | Black | 1-1747822-2 | 47.0 | | 32.0 |
| | YY | Black | 2-1747822-2 | | | |
| | XY | Black | 3-1747822-2 | | | |

- Tab Housing

Panel type






| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-1747819-3 | 46.5 | 47.0 | 12.5 |
| | Y | Black | 2-1747819-3 | | | |
| 4 | XX | Black | 1-1747820-2 | 33.8 | | 22.6 |
| | YY | Black | 2-1747820-2 | | | |
| | XY | Black | 3-1747820-2 | | | |

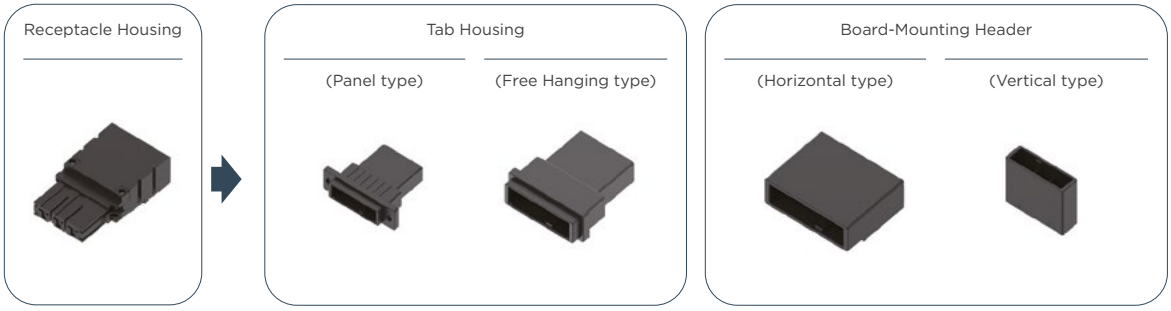
Panel type

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 12 | — | Gold | Black | 1903146-3 | 49.7 | 55.3 | 50.0 |
| | — | Gold | Black | 1-1903146-3 | | | |
| 20 | — | Gold | Black | 2013285-3 | 53.0 | | 76.4 |

NOTE: All products are RoHS compliant On selection.

# Dyna-Clamp Kit/ Cable Clamp Kit – 10.16mm pin pitch

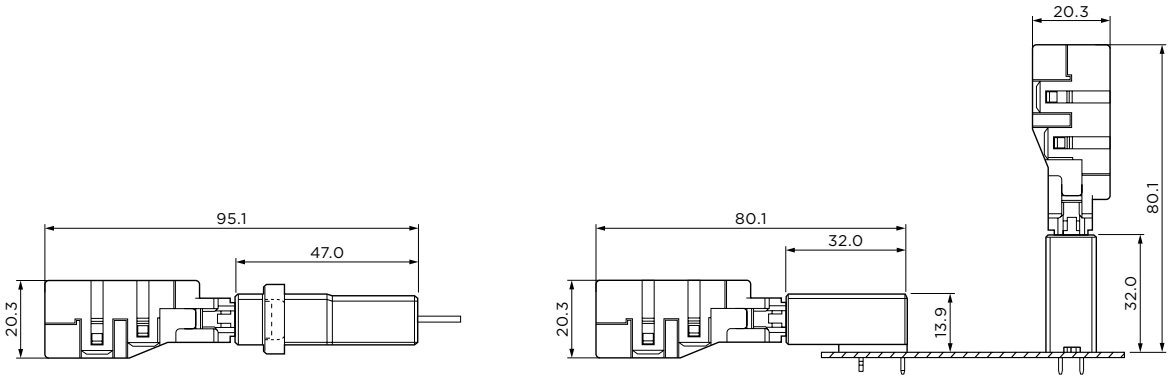
## Type Chart




| Pos | Key | Receptacle housing | Tab housing | | Board-Mounting Header | |
|---|---|---|---|---|---|---|
| | | | Panel type | Free Hanging type | Horizontal type | Vertical type |
| 3 | — | 1473668-1 | 1-353047-3 | 1-353046-3 | 1-353081-2 | 1-353082-2 |
| | | | | | 1-353081-3 | 1-353082-3 |
| 4 | XX | 1971239-1 | 1-917809-2 | 1-917808-2 | 1-1123309-2 | 1-1981458-6* |
| | YY | 1971239-2 | 2-917809-2 | 2-917808-2 | 2-1123309-2 | 2-1981458-6* |

* Silver-plated products

## Mated Dimension




Panel type/Free Hanging type

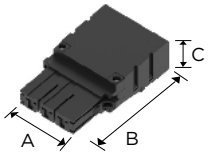
Horizontal type

Vertical type

## External Dimensions

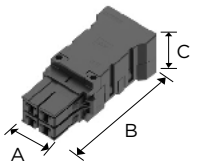
- Receptacle Housing

Single-row




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | — | Black | 1473668-1 | 40.3 | 69.3 | 20.3 |

Double-row



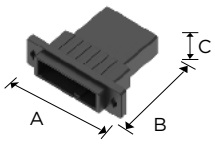

| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | XX | Black | 1971239-1 | 36.0 | 81.2 | 29.0 |
| | YY | | 1971239-2 | | | |

NOTE: All products are RoHS compliant On selection.

# Dyna-Clamp Kit /Cable Clamp Kit – 10.16mm pin pitch

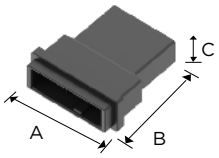
- Tab Housing

Panel type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-353047-3 | 57.0 | 47.0 | 12.1 |
| 4 | XX | Black | 1-917809-2 | 47.0 | | 26.7 |
| | YY | Black | 2-917809-2 | | | |

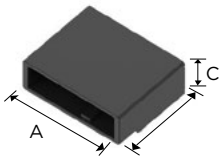
Free Hanging type




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 3 | X | Black | 1-353046-3 | 43.6 | 47.0 | 12.1 |
| 4 | XX | Black | 1-917808-2 | 33.4 | 47.0 | 26.7 |
| | YY | Black | 2-917808-2 | | | |

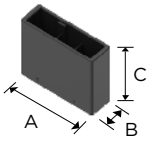
- Board-Mounting Header

Horizontal type




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1-353081-2 | 39.5 | 32.0 | 13.9 |
| | | Gold | Black | 1-353081-3 | | | |
| 4 | XX | Gold | Black | 1-1123309-2 | 29.4 | 42.2 | 24.1 |
| | YY | Gold | Black | 2-1123309-2 | | | |

Vertical type

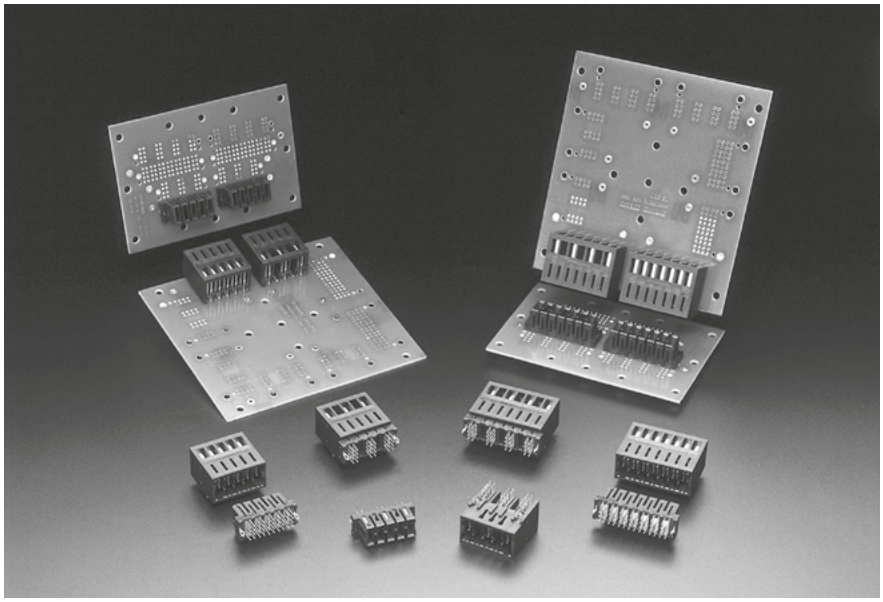



| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | X | Gold | Black | 1-353082-2 | 39.5 | 12.4 | 32.0 |
| | | | Black | 1-353082-3 | | | |
| 4 | XX | Silver | Black | 1-1981458-6 | 29.4 | 22.6 | |
| | YY | | Black | 2-1981458-6 | | | |

NOTE: All products are RoHS compliant On selection.

# DZ-5200

- Useful for enabling cableless control board. High-current board to board connectors with 30A per contact.
- Equipped with retention leg to protect board from load
- Space allocated to prevent the contact from twisting
- Stacking and parallel connection types available
- Circuit numbers are easily identified for board connectors
- Keying function included for flexibility when using multiple units
- Soldering without masking
- Passes UL, CSA and TUV standards



## Performance Specifications

| Item \ Pitch | 200 mils/400 mils<br>5.08mm/10.16mm |
|---|---|
| Rated Voltage | 5.08mm Pitch:250V AC(rms)/DC 10.16mm Pitch:600V AC(rms)/DC |
| Rated Current | 5.08mm Pitch:20A 10.16mmPitch:30A |
| Contact resistance | 2mΩ max |
| Withstanding Voltage | 5.08mm Pitch:2,200V AC 1 min 10.16mm Pitch:4,000V AC 1 min |
| Temperature | -55-+105°C |
| Product Specifications | 108-78186 |

## Materials and Plating

| Category | Materials | Plating |
|---|---|---|
| Receptacle Contact Tab Contact | Phosphor bronze<br>Copper alloys | Gold Plating<br>with Nickel under-plated |
| Tab | Phosphor bronze<br>Copper alloys | Tin, Gold Plating with Nickel under-plated |
| Housing | UL9 4V-0, thermoplastic PBT with glass fiber | |

# DZ-5200 – 5.08mm pitch for 5/7 position pins, 10.16mm pitch for 3/4 position pins

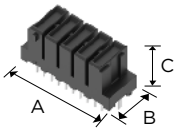
## Type Chart




| Pos | Color | Key | Socket Kit | Plating | — | Plug Kit |
|---|---|---|---|---|---|---|
| 3 | Black | — | 5-1747147-3 | Gold | — | 5-1747145-3 |
| 4 | Black | — | 5-1747147-4 | Gold | — | 5-1747145-4 |
| 5 | Black | — | 1-1747147-5 | Gold | — | 1-1747145-5 |
| 7 | Black | — | 1-1747147-7 | Gold | — | 1-1747145-7 |

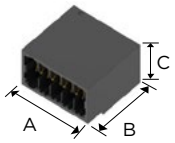
## External Dimensions

- Socket Kit




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | — | Gold | Black | 5-1747147-3 | 30.8 | 11.5 | 14.0 |
| 4 | — | Gold | Black | 5-1747147-4 | 40.9 | | |
| 5 | — | Gold | Black | 1-1747147-5 | 30.8 | | |
| 7 | — | Gold | Black | 1-1747147-7 | 40.9 | | |

- Plug Kit



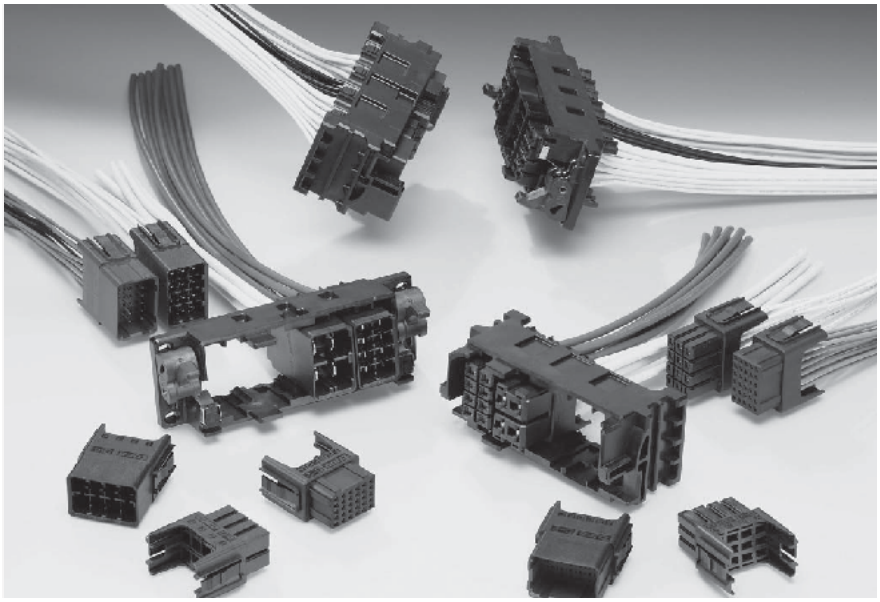

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 3 | — | Gold | Black | 5-1747145-3 | 28.8 | 27.0 | 17.5 |
| 4 | — | Gold | Black | 5-1747145-4 | 39.0 | | |
| 5 | — | Gold | Black | 1-1747145-5 | 28.8 | | |
| 7 | — | Gold | Black | 1-1747145-7 | 39.0 | | |

NOTE: All products are RoHS compliant On selection.

# Multi-Frame connector (MF Series)

The Multi-Frame connector is formed by combining the modular housing of the Dynamic Series connector with a resin frame. The modular structure can accommodate housings for D-2800, 3800, 4800 or 5800.

Additionally, the secure locking mechanism can be easily locked and unlocked by pressing the latches. The simple design saves time in assembly and maintenance.



## Main Performance

| Item \ Series | D-2800 | D-3800 | D-4800 | D-5800 |
|---|---|---|---|---|
| Rated Voltage | AC/DC 250V | AC/DC 600V | AC/DC 600V | AC/DC 630V |
| Rated Current | 5A | 15A | 25A | 40A |
| | When an AWG#18 wire is used | When an AWG#16 wire is used | When an AWG#12 wire is used | When an AWG#8 wire is used |
| Contact resistance | 10mΩ max | | | 2mΩ max |
| Withstanding Voltage | 1,500VAC(1 min) | | 2,500VAC(1 min) | 3,000VAC(1 min) |
| Operating Temperature | -55-+105°C | | | |
| Product Specifications | 108-78284 | 108-78285 | 108-78388 | 108-78389 |
| Applications Specifications | 114-5258 | 114-5148 | 114-5369 | 114-5206 |

## Materials and Plating

| Category | Materials | Plating |
|---|---|---|
| Receptacle Contact<br>Tab Contact | Phosphor bronze or copper alloy | Gold Plating with Nickel under-plated |
| Housing | UL94V-0, reinforced thermoplastic with glass fiber | |

Contact
The D-2, D-3, D-4 and D-5 contacts of the Dynamic series can be directly used.
(The existing tools can also be used as special tools and application tools)
See P.36 for the D-2 terminal. See P.83 for the D-4 terminal.
See P.46 for the D-3 terminal. See P.90 for the D-5 terminal.

# Multi-Frame Connector

## Product Features

- The modular structure can accommodate Dynamic series housings
- Panel mount
- Quick locking
- Easy unlocking by pressing the latches
- A key for preventing mis-plugging
- Easy operation

## Product Specifications

Product standard number 108-78644

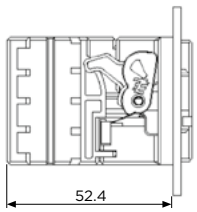
## Applications

- Semiconductor and liquid crystal production equipment
- Large control equipment and machine tools
- Other

## Performance Specification

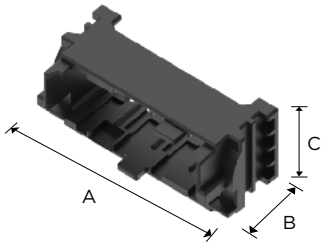
| Item | STD. |
|---|---|
| Frame Lock Strength | Pull force: 15kgf min |
| Durability | 50 cycles max |

## Mated Dimension



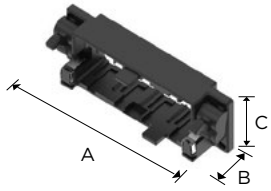

## External Dimensions

- Cable Side Frame




| Module | Key | Part Number | Dimensions(mm) | | |
|---|---|---|---|---|---|
| | | | A | B | C |
| 2 | W | 2390402-1 | 56.8 | 45.1 | 40.4 |
| 4 | Z | 2069524-4 | 97.1 | 45.1 | 40.4 |
| | Y | 2069524-3 | | | |
| | X | 2069524-2 | | | |
| | W | 2069524-1 | | | |

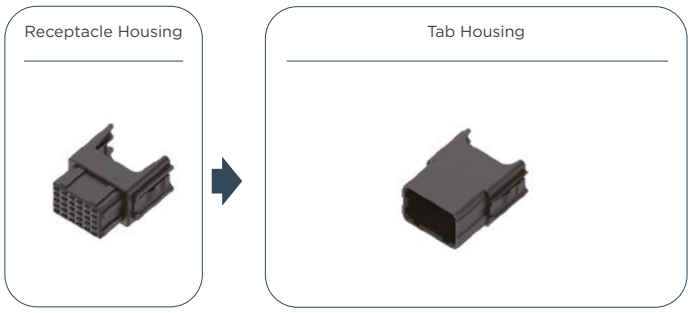
- Panel Side Frame




| Module | Key | Part Number | Dimensions(mm) | | |
|---|---|---|---|---|---|
| | | | A | B | C |
| 2 | W | 2390404-1 | 79.8 | 34.3 | 40.4 |
| 4 | Z | 2069526-4 | 120.0 | 34.3 | 40.4 |
| | Y | 2069526-3 | | | |
| | X | 2069526-2 | | | |
| | W | 2069526-1 | | | |

# Dynamic HTS Module – 12.0mm pin pitch

## Type Chart

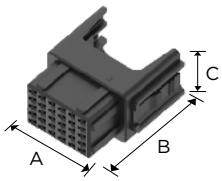



| Pos | Color | Key | Receptacle housing | Tab housing | Plating | Board-Mounting Header | |
|---|---|---|---|---|---|---|---|
| | | | | | | Horizontal type | Vertical type |
| 30 | Black | — | 1747365-1 | 1747366-1 | — | — | — |
| 12 | Black | — | 1747363-1 | 1747364-1 | | | |
| 8 | Black | — | 1871416-1 | 1871417-1 | | | |
| 4 | Black | — | 1871418-1 | 1871419-1 | | | |

# D-2800 Pitch: 3.75mm

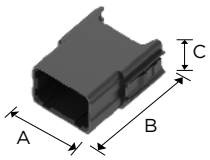
## External Dimensions

- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 30 | — | Black | 1747365-1 | 30.3 | 37.6 | 19.5 |

- Tab Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 30 | — | Black | 1747366-1 | 30.3 | 40.0 | 19.5 |

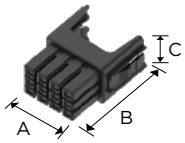
NOTE: All products are RoHS compliant On selection.

# Dynamic Series Connector – 12.0mm pin pitch

## D-3800 Pitch: 6.5mm

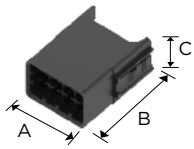
### External Dimensions

- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 12 | — | Black | 1747363-1 | 30.3 | 41.4 | 19.5 |

- Tab Housing

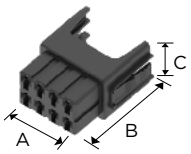



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 12 | — | Black | 1747364-1 | 30.3 | 40.0 | 19.5 |

## D-4800 Pitch: 6.35mm

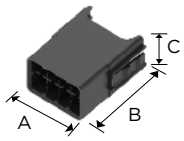
### External Dimensions

- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 8 | — | Black | 1871416-1 | 30.3 | 38.6 | 19.5 |

- Tab Housing

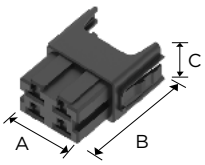



| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 8 | — | Black | 1871417-1 | 30.3 | 40.0 | 19.5 |

## D-5800 Pitch: 12.0mm

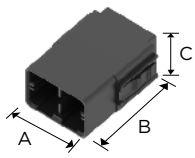
### External Dimensions

- Receptacle Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | — | Black | 1871418-1 | 30.3 | 41.4 | 19.5 |

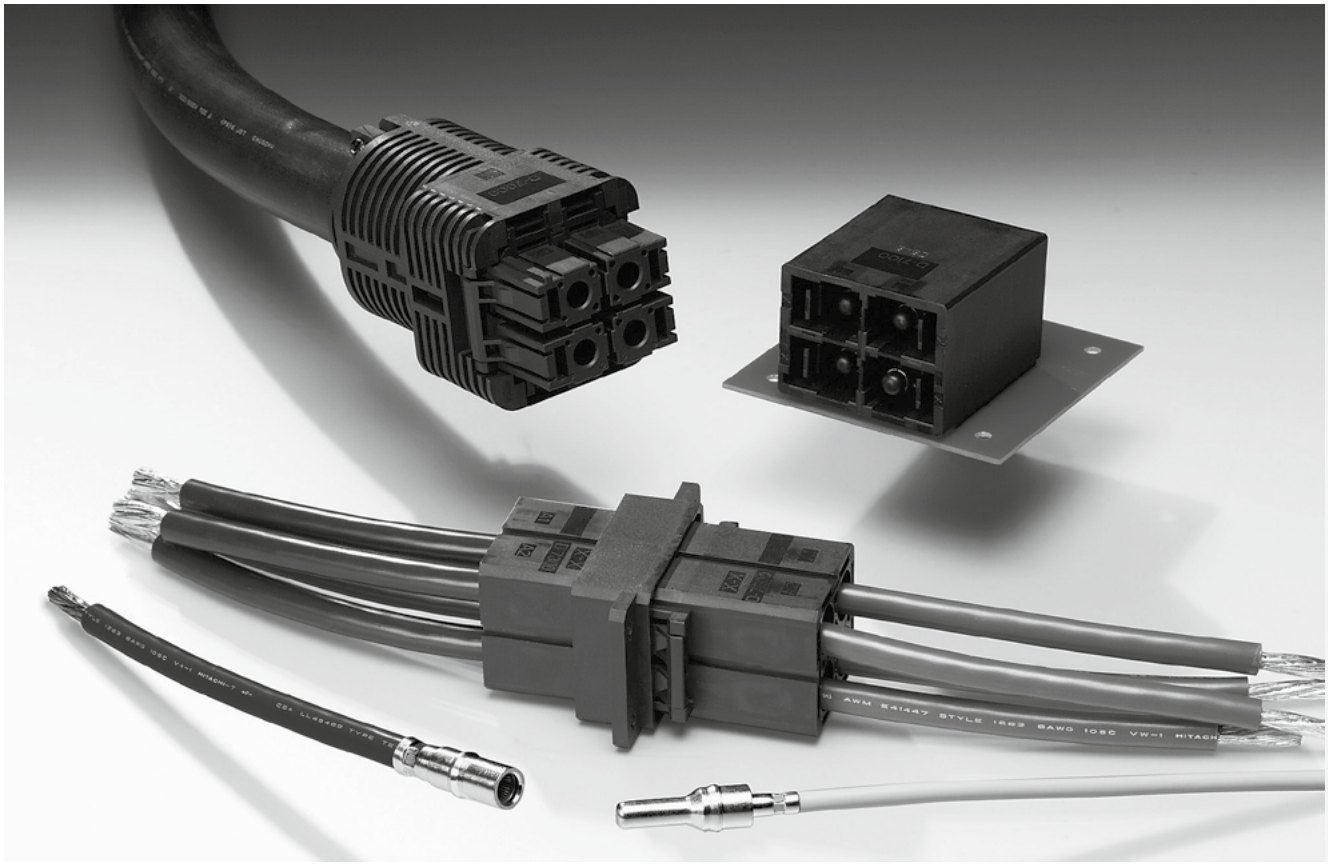
- Tab Housing




| Pos | Key | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 4 | — | Black | 1871419-1 | 30.3 | 44.1 | 19.5 |

NOTE: All products are RoHS compliant On selection.

# D-7000 Series



## Series introduction

Dynamic D-7000 series includes the highest power rated connector that is max 65A (per contact, using max. wire size)

It is available in board to wire, wire to wire, wire to panel -some are finger safe (Reverse Mount Type) – and long pin types all providing stable electrical connections for semiconductor manufacturing machines, construction plant etc.

The number of positions is the industry standard 4P, which will meet a wide range of application requirements.

The receptacle contact is the 'crown band type containing a tube shape spring, meaning high performance and operation feasibility.

## Product Features

**1. Achieved High Current and High Reliability up to 65A**
To accommodate the high current of 65A, we adopted, for the first time, a crown band with a multi-point contact mechanism in the receptacle contact. This contact is not only highly reliable, but disperses the heat generated when high current passes through the contact

**2. Sequential Connection**
Sequential connection is compatible 2 types of pin contact are available, standard type and long type. This is ideal for applications when sequential connections from the crown pin are required.

**3. Other**
- Standard type and reverse type are available, offering a wide variety of mating options
- By using cable clamp type applicable to jacket cable, it can be used as an I/O connector

# D-7000 Series Performance and Specifications

## Performance

| Item | |
|---|---|
| Pitch | 16mm |
| Rated Current | 65A max |
| Rated Voltage | 630V AC / DC |
| Dielectric Withstand Voltage | 3000 VAC |
| Total resistance | 2mΩ max |
| Insertion strength: | 49.0N max (per positions) |
| Withdrawal strength | 4.9N min (per positions) |
| Durability | 20 cycles |
| Locking strength | 196N min |

## Positions / Wire size / Rated current

Unit: A (Amps)

| Position | Series | Wire Size(AWG) | | | | | |
|---|---|---|---|---|---|---|---|
| | | | 14 | 12 | 10 | 8 | 6 |
| 4 | Wire-to-board | 18 | 23 | 31 | 35 | 50 | 60 |
| 4 | Wire-to-wire | — | — | 31 | 35 | 55 | 65 |
| 4 | Wire-to-wire(cable clamp type) | — | — | 25 | 35 | 45 | 55 |

## Product Specifications

| | |
|---|---|
| Product Specifications | 108-78470 |
| TEST REPORT | 501-78004 |
| Extraction tool application specification | 408-78147 |
| Applications Specifications | 114-5452 |

When applicable, please be sure to order the operation manual.
It can also be found in the online electronic specifications catalog.

## Materials and Plating

| Type | Item | Tab contact | Receptacle Contact (Crown-shaped Terminal) |
|---|---|---|---|
| Contacts | Materials | Copper | Copper alloys |
| | Plating | Silver plating with Nickel under-plated | Gold plating with Nickel under-plated |
| Board Mount Header | Materials | Copper | — |
| | Plating | Silver plating with Nickel under-plated | — |
| Housing | Materials | UL94V-0, Thermoplastic PBT containing glass fiber | |

## Safety Standards

The safety specifications listed below are approved on specific part numbers. Please contact our Technical Support Centre to check whether the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Tyco Electronics Specifications.

| SeriesSTD. | D-7100Series | | | D-7300Series | | |
|---|---|---|---|---|---|---|
| | Rated Voltage | Rated Current | Temperature Range | Rated Voltage | Rated Current | Temperature Range |
| Product Specifications 108-5453 | 630V AC/DC | (As shown above) | -55°C ~+105°C | 630V AC/DC | (As shown above) | -55°C ~+105°C |
| ULFile No.E28476 (Recognized Component) | 600V AC | Based on the requirements of Application | Uses AWG6 wires Allowable maximum 6A | 600V AC | Based on the requirements of Application | Based on the requirements of Application |
| TÜVLicense No. R50252537IP protection Socket: IP-10 Plug: IP-00Overvoltage type (II) 50 cycles of repeated pluggingandunplugging | 630V AC/DC | 4-No of Pos.<br>AWG / WTW / WIRE-TO BOARD / Dyna-clamp<br>16 / 18 / — / —<br>14 / 23 / — / —<br>12 / 31 / 31 / 25<br>10 / 35 / 35 / 35<br>8 / 50 / 55 / 45<br>6 / 60 / 65 / 55 | -55°C ~+105°C | 630V AC/DC | 4-No of Pos.<br>AWG / WTW / WIRE-TO BOARD / Dyna-clamp<br>16 / 18 / — / —<br>14 / 23 / — / —<br>12 / 31 / 31 / 25<br>10 / 35 / 35 / 35<br>8 / 50 / 55 / 45<br>6 / 60 / 65 / 55 | -55°C ~+105°C |

NOTE: All products are RoHS compliant On selection.

# D-7000 Series Contact

## Crimped Types



Receptacle Contact
(Receptacle housing usage)



Tab contact
(Tab housing usage)

## Gold-plated Receptacle contact, Sliver plated Tab contact

| Wire Range | | Outside Diameter ofInsulation | Diameter of Contacts | | | Applicable tools | |
|---|---|---|---|---|---|---|---|
| | | | Receptacle Contact | Tab contact | | | |
| AWG | mm2 | mm | | | | | |
| 16-14 | 1.6-2.6 | 10 | 1871132-4 | — | | 409777-1*1 | |
| 12-10 | 2.7-6.6 | 10 | 1871132-3 | STD. | 1871131-3 | 2155369-1 *2 | 2155816-1 *3 |
| | | | | LONG | 1-1871131-3 | | 2155815-1 *4 |
| 8 | 6.7-10.5 | 10 | 1871132-2 | STD. | 1871131-2 | | 2155814-1 *5 |
| | | | | LONG | 1-1871131-2 | | |
| 6 | 10.6-16.7 | 10 | 1871132-1 | STD. | 1871131-1 | | 2155810-1 *6 |
| | | | | LONG | 1-1871131-1 | | |

Note: For details, please contact the purchase agent or sales department.

*1 Hand tool (W-shaped crimp)
*2 Electric hydraulic tool See P.121.
If you have any questions, please contact the sales department.

*3 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#12; crimp shape: hexagon)
*4 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#10; crimp shape: hexagon)
*5 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#8; crimp shape: hexagon)
*6 Mold (2155369-1 used together with the electric hydraulic tool / applicable wire: AWG#6; crimp shape: hexagon)

The receptacle contact can be used in all receptacle housings, the tab contact can be used in all tab housings

NOTE: All products are RoHS compliant On selection.

# D-7100 – 16mm pin pitch

## Type Chart




| Pos | Color | Receptacle housing | Tab housing | Plating | Board-Mounting Header |
|---|---|---|---|---|---|
| 4 | Black | 2134055-1 | 2134057-1 | Silver | 1981823-1 |

## Relative Product Information

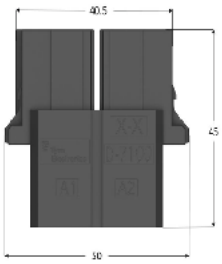
Applicable contact...P.110
Performance & Specifications...P109

## External Dimensions

- Receptacle Housing

4P Model: 2134055-1



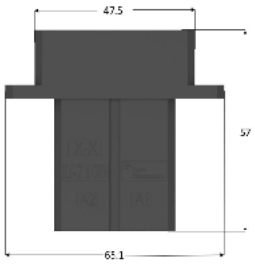



- Tab Housing

Panel type

4P Model: 2134057-1

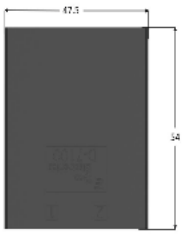





- Board-Mounting Header

4P Model: 1981823-1






NOTE: All products are RoHS compliant On selection.

# D-7300 – 16mm pin pitch

## Type Chart




| Pos | Color | Receptacle housing | Plating | Tab housing |
|---|---|---|---|---|
| 4 | Black | 2134059-1 | Silver | 2134061-1 |

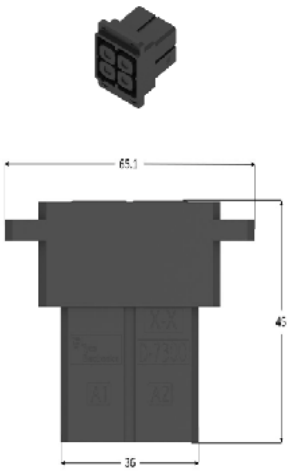
## Relative Product Information

Applicable contact...P.110
Performance & Specifications...P109

## External Dimensions

- Receptacle Housing

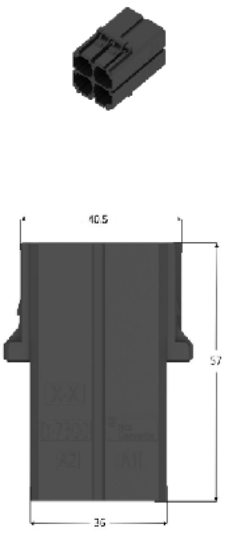
4P Model: 2134059-1




- Tab Housing

Panel type

4P Model: 2134061-1

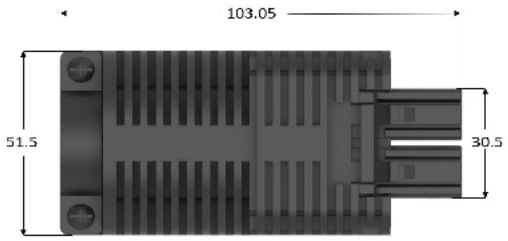



NOTE: All products are RoHS compliant On selection.

# D-7100 Dyna-Clamp Kit – 16mm pin pitch

### External Dimensions

- Receptacle Housing

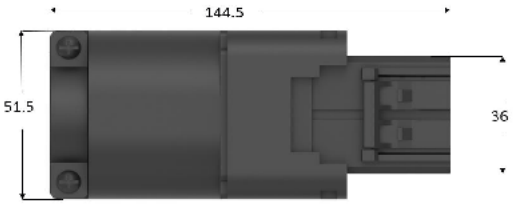



| Pos | Color | Cable Size | Part Number |
|---|---|---|---|
| 4 | Black | S ø19 – 25 | 2-2069313-1 |
| | | M ø25 – 31 | 1-2069313-1 |

# D-7300 Dyna-Clamp Kit

### External Dimensions

- Receptacle Housing

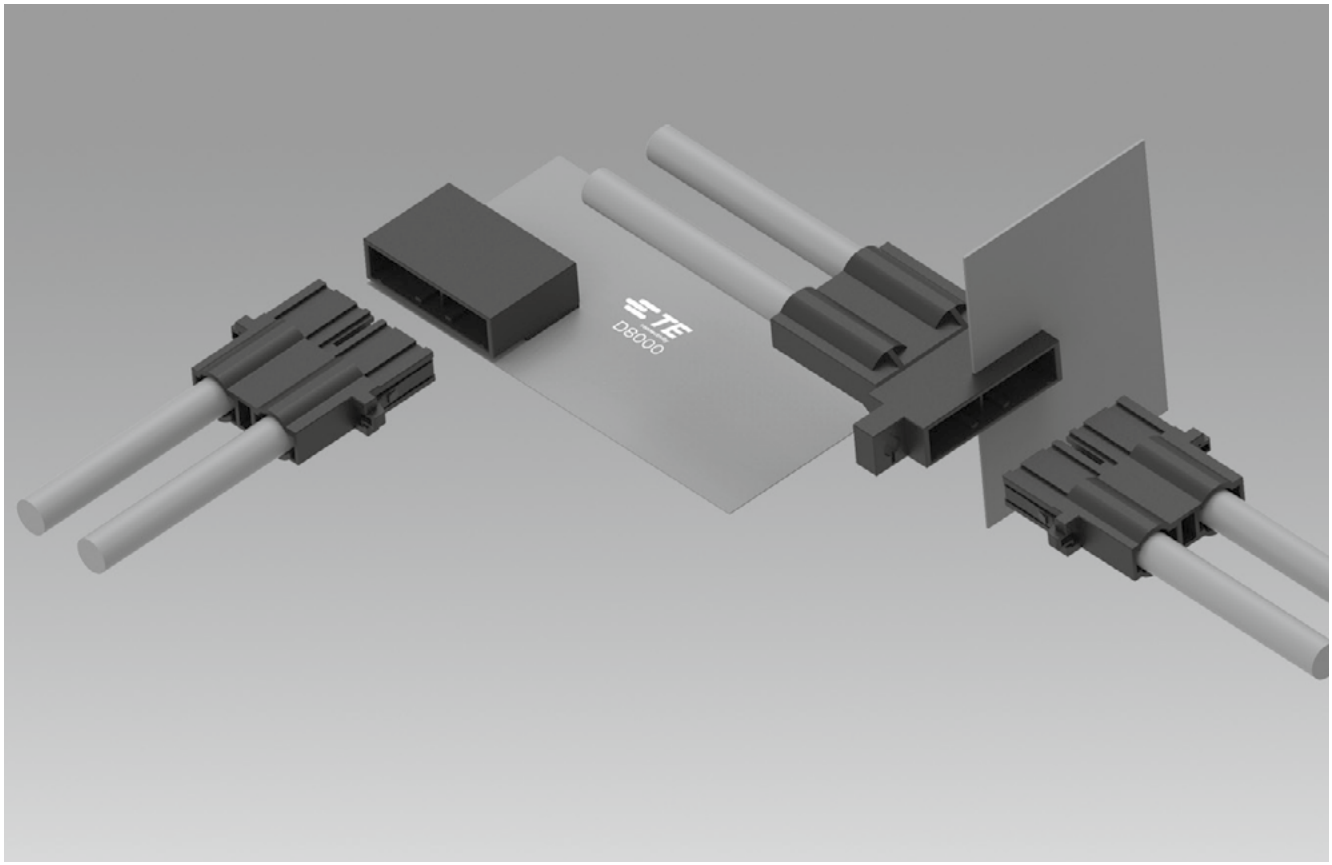



| Pos | Color | Cable Size | Part Number |
|---|---|---|---|
| 4 | Black | S ø19 – 25 | 2-2069312-1 |
| | | M ø25 – 31 | 1-2069312-1 |

### Relative Product Information

Applicable contact...P.110
Performance & Specifications...P109

# Dynamic D-8000 Series




## Series introduction

The D-8000 Series are by far the products with the largest current-carrying capacity in the Dynamic product line. The current-carrying capacity is up to 90A per unit for wire- to-board and 100A per unit for wire-to-wire.

The compact design provides more available space for applications requiring higher current-carrying capacity; the high temperature resistant board-end material can be applied to the reflow soldering process for easy uniformity on the client side.

D-8000 products, in line with the high reliability, small size and high cost performance that Dynamic products have always maintained, provide higher current-carrying capacity to meet the needs of the industrial market for high-current connectors.

## Product Highlights

**1. High current-carrying capacity**
D-8000 products can reach 90A per unit for wire-to-board products and 100A per unit for wire-to-wire products. This product addition greatly improves the current-carrying range of the Dynamic product line.

**2. Sequential Connection**
Compared with the D-7000 products, the higher current carrying D-8000 connectors have a smaller size making them very cost- effective.

**3. Silver-plated contact area of the terminal**
D-8000 products balance the dual requirements of product performance and price, so the silver-plated contact design is used.

**4. Board- Mounting Header suitable for reflow soldering**
The D-8000's board-end connector is made of high temperature material and is suitable for reflow soldering. This allows for standardization and time savings on the soldering process.

# D-8000 Series Performance and Specifications

## Performance

| Item | |
|---|---|
| Pin Pitch | 24.4 mm |
| Rated Current | 100A (wire-to-wire) / 90A (wire-to-board) max |
| Rated voltage | 1000V |
| Withstanding voltage | 3000V |
| Contact resistance | 0.8mΩ max |
| Durability | 10 cycles |
| Insertion force | 58.8N max (per pos) |
| Extraction force | 58.8N max (per pos) |
| Locking mechanism holding force | 96 N |
| Retention force of contact in plastic housing | 96 N |
| Wire Range | AWG 3 |
| Operating Temperature | -55°C to 105°C |

## Product Specifications

| | |
|---|---|
| Product manual | 108-140254 |
| Operation manual | 114-78058-1 |
| INSPECTION REPORT | 501-78768 |

When using, be sure to order the instruction manual.
Also available from the electronic specification catalog on the Internet.

## Positions / Wire size / Rated current

Unit: A (Amps)

| Pos | Series | Cable Size (AWG) |
|---|---|---|
| | | 2 |
| 2 | Wire-to-board | 90 |
| 2 | Wire-to-wire | 100 |

## Materials and Plating

| Category | Material | Plating |
|---|---|---|
| Receptacle contact, tab contact | Copper alloy | Silver (2 µm) over nickel plated (1.27 µm) plated |
| Board-mounting tab contact | Copper alloy | Mating face: Silver (2 µm) over nickel plated (1.27 µm) plated<br>Soldering face: Tin (2 µm) over nickel plated (1.27 µm) plated |
| Receptacle housing and tab housing | UL94V-0, PBT containing glass fiber | |
| Board-end housing | UL94V-0, high temperature nylon containing glass fiber | |

# D-8000 Series Contact

## Crimp Contacts





## Silver-plated type

| Wire Range | | Outer Diameter of Insulation | Contact | | Applicable Tools |
|---|---|---|---|---|---|
| | | | Receptacle Contact | Tab Contact | |
| AWG | mm2 | mm | | | |
| 3 | 25 | 9.5 | 2373747-5 | 2351982-5 | 2372716-1 |

Note: When ordering products, please confirm the sales lot.
Please contact your agent or sales department for details.

Receptacle contacts are available for all receptacle housings, and the tab housings are available for all tab housings.

NOTE: All products are RoHS compliant On selection.

# Dynamic D-8000 – 24.4mm pin pitch

## Type Chart

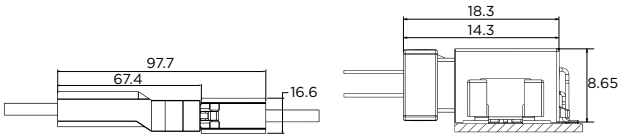



| Pos | Color | Receptacle Housing | Tab Housing | Plating | Board-Mounting Header |
|---|---|---|---|---|---|
| 2 | Black | 1-2351981-2 | 1-2352216-2 | Silver | 1-2351965-2 |

## Relative Product Information

Applicable contact...P.116
Performance & Specifications...P.115

## Mated Dimensions

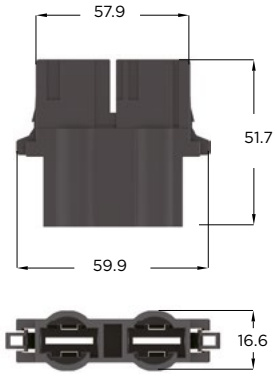



Wire to Wire

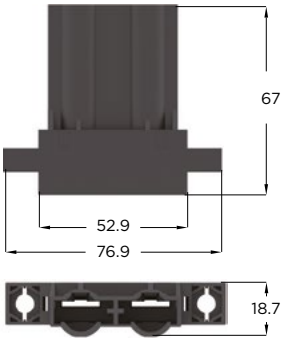
Wire-to-Board, Horizontal type

## External Dimensions

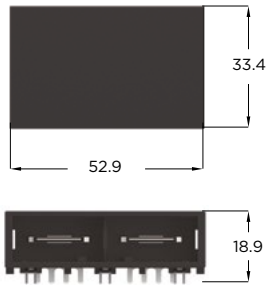
- Receptacle Housing




- Tab Housing

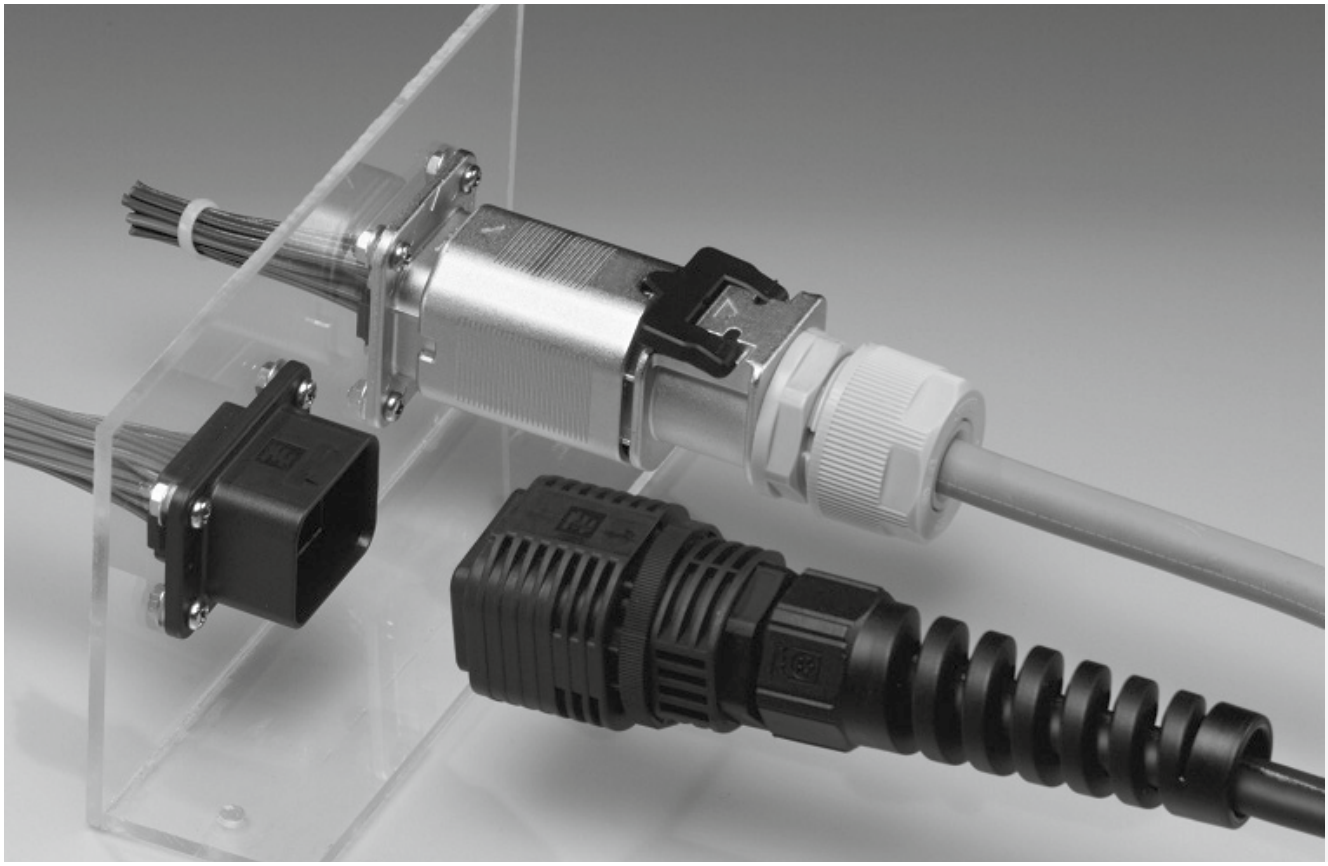



- Board-Mounting Header




NOTE: All products are RoHS compliant On selection.

# Multiple Enclosure Connector



## Series introduction

Human machine interfaces (HMI) can be found on a variety of machines. They allow people to communicate with equipment to control, operate and program. The multiple enclosure connector was developed as a connector for I/O interfaces for HMI.

They are superior in operation, very safe and easy to use. Plus, they use contacts from the Dynamic Series, providing high reliability.

There are two types of Multiple Enclosure connectors: metal and plastic. Their use depends on the type of environment.

## Product Features

**1. Wire Sizes**
The metal type fits wires with diameter from 10mm to 11mm, the plastic type from 5mm to 12mm.

**2. Applicable Contacts**
The highly reliable Dynamic D-1000 and D-3000 series terminals are used as contacts for I/O connectors for human machine interfaces (HMI). These can be crimped by using existing Dynamic crimping tools.

**3. IP65 (plastic type), IP67 (metal type) i**
The connectors have dust and water proofing for use in harsh conditions. (Note: need to be used with cable gland)

**4. Safety Lock Mechanism**
The lock mechanism uses the fast on/off lock concept which can be locked or released by just grabbing the connec tor. Plus , our proprietary double lock mechanism prevents vibration related disconnect accidents.

**5. Two Types of Housing**
The series includes two types of housing, a standard type and a reverse type for preventing exposure of live contacts.

**6. Cable Clamp Interface**
C able clamps , which are commercially available and can be selected according to application and purpose, can be attached to cover the cable entering the connector.

**7. Other Considerations**
Audible & tactile locking design ensure the complete connection between receptale and tab.

# Multiple Enclosure Connector

## Performance Specifications

| Item | Standard |
|---|---|
| Rated Current | See the reference |
| Rated Voltage | 125VACrms (for the part with a pitch of 2mm) |
| Dielectric Withstand Voltage | 1,000V AC (1 min) |
| Operating temperature | -30°C –105°C (including the temperature rise caused by electrification) |
| Total resistance(low level) | 10mΩ max (initial) |
| Insulation resistance | 1000mΩ min (initial) |
| Insert Strength | 39.2N max (per position) |
| Withdrawal Strength | 4.9N max (per position) |
| Durability | 50 cycles |
| Enclosure Lock Strength | 98N min |

## Product Specifications

| | |
|---|---|
| Product Standards | 108-78417 |
| Applications Specifications | 114-5377 |
| Manual | 411-78287,78288(14+1P)<br>411-78262,78277(24P) |

Plastic type

| | |
|---|---|
| Product Standards | 108-78566 |
| Mounting Application Standard | 114-5377 |
| Manual | 411-78293(32P) |

## Contact

Refer to D-1000 contact on P.21
and D-3000 contact on P.48

## Positions / Wire size / Rated current

| Contact | Receptacle contacts and tab contact | | | | | | |
|---|---|---|---|---|---|---|---|
| Wire Size / Position | AWG #18 | AWG #20 | AWG #22 | AWG #24 | AWG #26 | AWG #28 | AWG #30 |
| 24Pos | — | — | 2 | 1.5 | 1 | 0.8 | 0.5 |
| 14+1Pos | 3.5 | 2.7 | 2.5 | 2 | 1.5 | 1 | 0.8 |

Plastic type

| Contact | Receptacle contacts and tab contact | | | | |
|---|---|---|---|---|---|
| Wire Size / Position | AWG #22 | AWG #24 | AWG #26 | AWG #28 | AWG #30 |
| 32Pos | 1.5 | 1 | 0.8 | 0.5 | 0.5 |

## Materials and Plating

Metal type

| Parts Materials | Materials | Finish |
|---|---|---|
| Contact | Copper alloys | Gold plating over Nickel under- plated |
| Connector Housing | UL94V-0, thermoplastic poly-amide | — |
| Connector Case | Zinc | Nickel-plated |
| Bottom | Nitrile rubber | — |
| Shield Grip | Cold-rolled steel | Nickel plating over copper base |

Plastic type

| Description | Materials | Finish |
|---|---|---|
| Contact | Copper alloys | Gold plating over Nickel under-plated |
| Connector housing | UL94V-0, thermoplastic poly-amide | — |
| Connector Case | UL94V-0, thermoplastic poly-amide | — |
| Bottom | Nitrile rubber | — |

# Multiple Enclosure Connector

## Type Chart










| Type | Pos. | Receptacle housing | Polarity | Housing | | Tab housing |
|---|---|---|---|---|---|---|
| | | | | Receptacle (R) / Tab (T) | | |
| Metal housing type | 24 | 1939847-1 | Standard | 1939850-1(R) | 1939839-1(T) | 1939840-1 |
| | | 1981560-1 | Reverse | 1981556-1(T) | 1981551-1(R) | |
| Metal housing type | 14+1 | 1939847-1 | Standard | 1981135-1(R) | 1981133-1(T) | 1939840-1 |
| | | 1981560-1 | Reverse | 1981947-1(T) | 1981945-1(R) | |
| Plastic housing type | 32 | 1981919-1 | Standard | 1981921-1(R) | 1981914-1(T) | 1981913-1 |
| | | | Reverse | 2013393-1(T) | 2013391-1(R) | |

Shield clip P /N 1939851 -1 (Receptacle housing) tool: 1891820 -1 (411-78273)

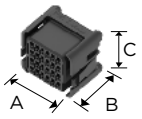
## Relative Product Information

Applicable contact... 24 position product: D-1000 S.M contacts see P.21
14+1 position product: The D-1000 & D-3000 contacts see P.21 and 48
32 position product: D-1000 S.M contacts see P.21

## External Dimensions

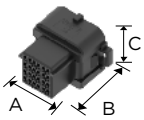
- Receptacle Housing

Standard Type (Receptacle housing)




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 24 | — | — | Black | 1939850-1 | 19.6 | 15.3 | 16.8 |
| 14+1 | — | — | Black | 1981135-1 | 22.0 | 22.8 | |
| 32 | — | — | Black | 1981921-1 | 27.2 | 15.3 | 17.6 |

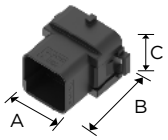
Reverse (Tab housing)




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 24 | — | — | Black | 1981551-1 | 27.5 | 23.7 | 20.2 |
| 14+1 | — | — | Black | 1981945-1 | | 23.7 | |
| 32 | — | — | Black | 2013391-1 | 29.5 | 23.0 | 17.0 |

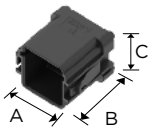
- Tab Housing

Standard Type (Tab housing)




| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 24 | — | — | Black | 1939839-1 | 27.5 | 23.3 | 20.0 |
| 14+1 | — | — | Black | 1981133-1 | 27.3 | 27.5 | 20.2 |
| 32 | — | — | Black | 1981914-1 | 29.5 | 22.3 | 17.0 |

Reverse (Receptacle housing)



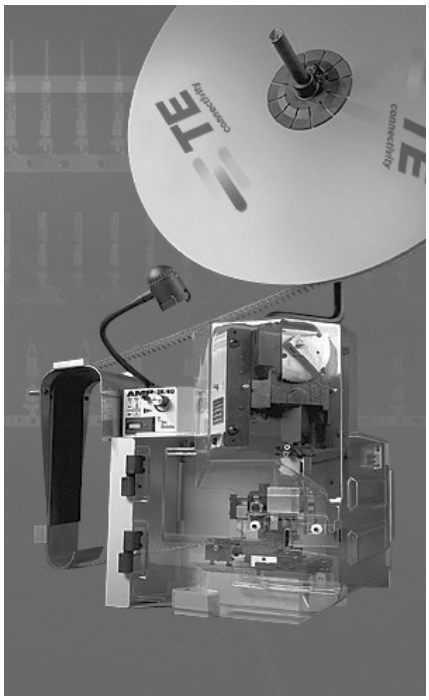

| Pos | Key | Plating | Color | Part Number | Dimensions | | |
|---|---|---|---|---|---|---|---|
| | | | | | A | B | C |
| 24 | — | — | Black | 1981556-1 | 19.6 | 20.8 | 16.8 |
| 14+1 | — | — | Black | 1981947-1 | 22.8 | 28.2 | |
| 32 | — | — | Black | 2013393-1 | 27.2 | 20.0 | 17.6 |

NOTE: All products are RoHS compliant On selection.

# Applicable Tools

### AMP – 3K/AMP – 5 K Tabletop Crimping Machine.

AMP – 3K/AMP – 5 K is a compact, low-cost desktop crimping machine. A DC motor linear scheme is used for low noise, and motor speed adjustment can be easily changed. It offers a wide range of crimping operations options with simple operation and a comfortable working environment.

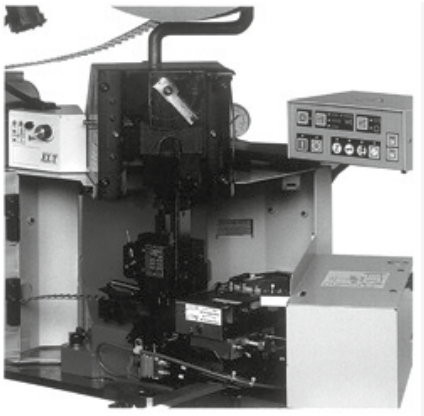


- It can be equipped with other companies' application tools.
- The crimping height can be adjusted at 0.013 mm per step.
- It can be used with a power supply of AC100V/240V.
- Low noise and easy speed adjustment are achieved due to the DC motor drive.
- Multiple modes and optional parts are available depending on the operating environment.

| Name | | AMP-3K | AMP-5K |
|---|---|---|---|
| Part Number | Type Universal mount type | 1725950-3 | 1725900-3 |
| | AMP quick mount type | 1-1725950-2 | 1-1725900-2 |
| | Stroke | 30 mm | |
| | Dimensions | The application tool is mounted on the safety cover closed side (no reel): 512mm (width) x415mm (depth) x510mm (height) | |
| | | The application tool is mounted on the safety cover closed end (no reel): 427mm (width) x523mm (depth) x510mm (height) | |
| | Weight | About 70kg (main body of the crimping machine) | |
| | Power supply | AC100–240V ( 310% ) Single-phase 50 / 60Hz (6A) | |
| | Cycle time | 0.4 s (when the jog mode is terminated) | |

### SCM Stripper Crimping Machine (Tabletop Crimping Machine)

Stripper Crimping Machine with exchangeable Dies. With optimum processing of jacket cable ends, the operator selects among strip and crimp, strip only or crimp only with one touch.



| Type | AMP-3K Specification 1596509-3 | AMP-5K Specification 1596509-4 |
|---|---|---|
| Applicable Wire | AWG 32-14 with the maximum skin outer diameter of 5.08mm (some AWG32-30 wires are inapplicable. ) Please contact us for details. | |
| Jacket strip Dimensions | Min 29mm (or wire set if the peeling size is 29–45mm) The time is longer than usual. | |
| Strip Length | 2.5-10mm | |
| Usable Applicators | Our company's 40mm stroke side feed application tool | |
| Noise level | < 82 dB | |
| Crimp ability | 13,345N (1,360kgf) Can be crimped to the AWG14 | 22,226N(2,268kgf) Can be crimped to the AWG10 (or to AWG14, if it is an SCM) |
| Power supply | AC 100-240V single phase 50/60Hz | |
| Air pressure | 0.49 – 0.59MPA (5 – 6kg/cm2) | |
| Machine weight | About 80 kg | |

AMP-3K Specification SCM

# Applicable Tools

### TE REC-Li60 (charging hydraulic tool)

- The lithium-ion battery is the lightest in its class.
- High power due to dual Battery-electric & hydraulic pump use.

Product Specification Rated output 54 kN Crimp Range: 5.5 to 60mm2
Electric machine: 14.4 V DC motor
External dimensions 286 mm (length) x 285mm (height) x 75mm (width)
Weight: 2.7 kg (60 mm 2 Dices, battery pack included)
No. of times can be crimped: 270 times (60 mm2 crimp per hour), Manufacturer Part Number: 2155369 – Δ



### TE REC-Li 250 M (charging hydraulic multi- function tool)

Product Specification Rated output 127kN
Crimp Range: 14 to 250 mm2 (copper wire bare pressure terminal and sleep)
Electric motor: 14.4 V DC motor
External dimensions 340mm (length) x 280mm (height) x 75mm (width)
Weight: 4.2kg (250mm 2 Dices, battery pack included)
No. of times can be crimped: 50 times (250mm2 crimp per hour),
Manufacturer Part Number: 2155363 – Δ

### Key Plug–equipped D-1000 Series



Part Number:1939588-1

### Receptacle Contact Cutting Tool D-1000 Series

Part Number: 919041-3
Application Specification: 411-78047

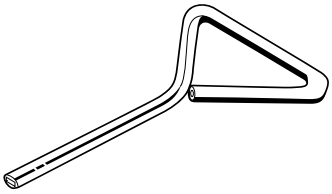
### Key Plug–equipped D-2000 Series

(Used to prevent misinsertion)
Avoid mis-plugging when connectors with the same No of Pos. are used together.



Part Number:641994-1

### Receptacle Contact Cutting Tool D-2000 Series



Part Number: 919041-2
Application Specification: 411-78047

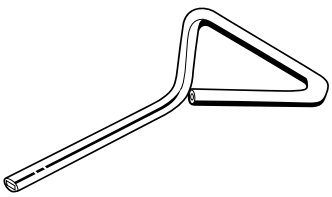
### Key Plug–equipped D-3000 Series

(Used to prevent mis-plugging)
Avoid mis-plugging when connectors with the same No of Pos. are used together.



Part Number:175855-1

### Receptacle Contact Cutting Tool Series D-3000



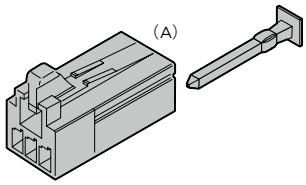
Part Number: 919041-1
Application Specification: 411-78047

# Applicable Tools

## How to use the plug and cutting tool

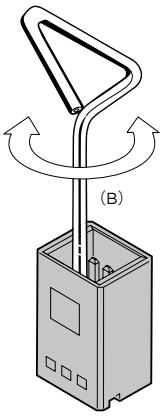
*It should be noted that some of the products (D-2100 S/D-2100 D) to prevent mis-insertion, use keying mechanism from the beginning.

① Keying Plug inserted in one pole of the receptacle housing.




② Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn tool as shown.

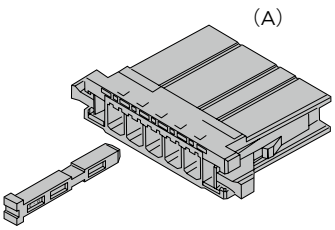
**In tab Hous ing (Pane l/ freehanging type), 1 pole is not inserted and is left free.




## How to use the plug and tool for the D-3000 Series

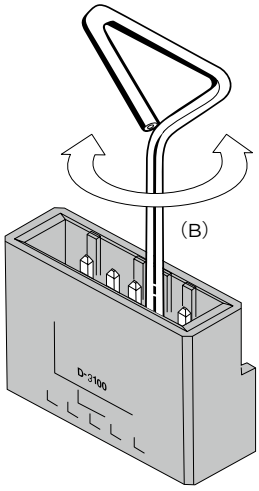
In addition, mis-insertion function keying has been installed from the beginning in some of the products (D-3100S/ D-3100M/ D-3200S/D-3200M)

① The keying plug is inserted into the receptacle housing

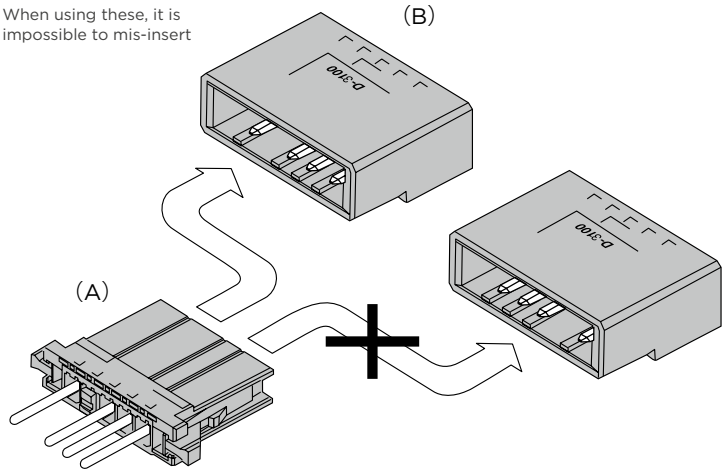



② Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn tool as shown

* In tab Housing (Panel/ freehanging type), 1 pole is not inserted and is left free




③ When using these, it is impossible to mis-insert



# Applicable Tools

### Hand tools PEW 12, D-1000, D-3000 and D-4000 series



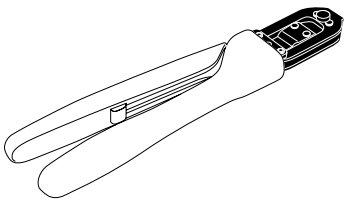

- Crimping with a straight action feel
- By manipulating the fulcrum of the handle, we have created a crimper that, while double action, is almost like straight action.
- Interchangeable dies
- The dies are easy to change. This means a wide variety of terminals can be handled with the minimum number of tools.
- Improve work efficiency
- Contact series, wire sizes and crimp heights printed on work surface of dies.
- Lower cost than existing specialized tools
- The superior functionality you want, at a price you like.

### Hand Tools CERTI-CRIMP II, D-1000 Series Flip Locator, D-2000 Series, D-3000 Series, D-5000 Series

Crimp part, as well as the machine, are highly reliable, Straight action method is introduced.



D-1000 series with Flip Locator

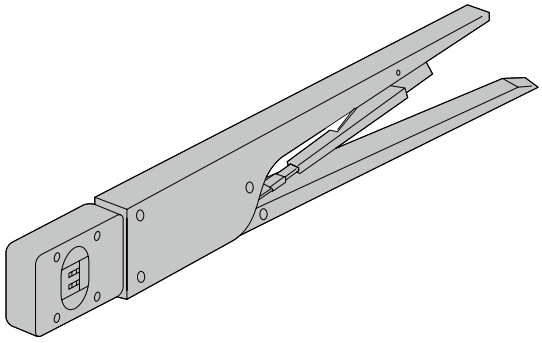


Part Number: See P.17,36,46,90.

- Handles are completely covered in urethane providing an easy grip and gentle on hands.
- Wire ranges and crimping height control values are printed on the crimping head for easy confirmation while working. Also, the ratchet in the handle keeps crimping quality very consistent.
- Hand crimping tool with wire stripper has four variations, while the previous model had only three variations.
- We recommend periodic maintenance when using hand crimping tools to keep crimping quality consistent.

### Hand Tool D-4000 Series

Crimper uses the reliable straight action method

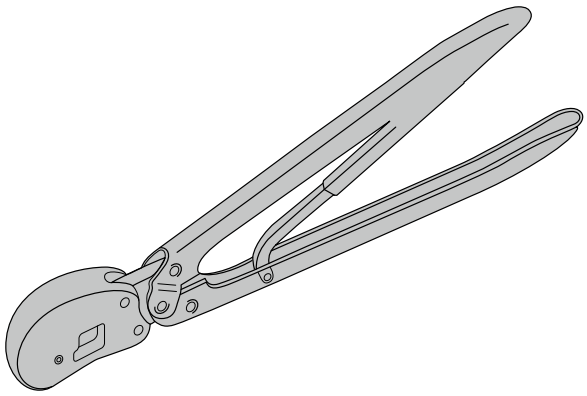


Part Number: See P.83

# Applicable Tools

### Hand Tool D-5000 Series

As with machine use, the reliable straight action method is used.



Part Number: See P.90

### Extraction Tool for D-1000 Series

Used to pull D-1000 from the housing



Part Number:1891526-1
Manual: 411-78241

### Extraction Tool for D-2000 Series

Used to pull D-2000 contacts from the housing

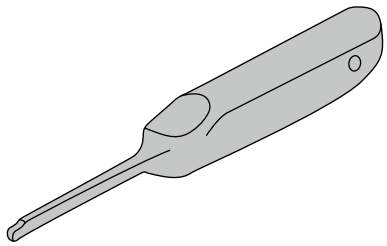


Part Number:1276716-1

# Applicable Tools

### Extraction Tool for D-3000 Series

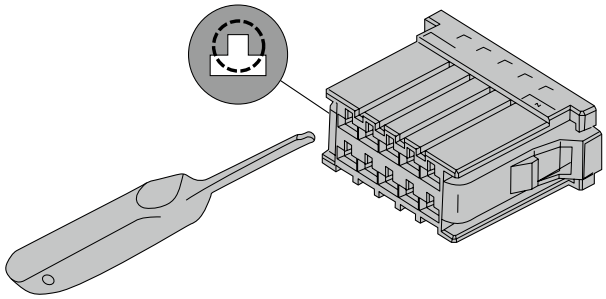
Wiring type tool for pulling the contact from the housing



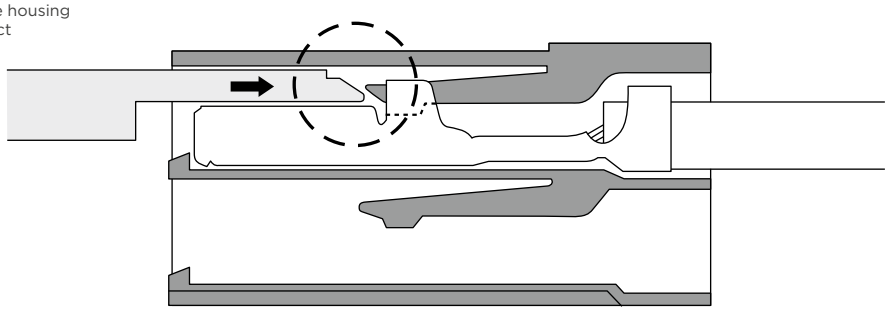
Model: 234168-1
Operating Manual: 411-5726

### Using the extractor

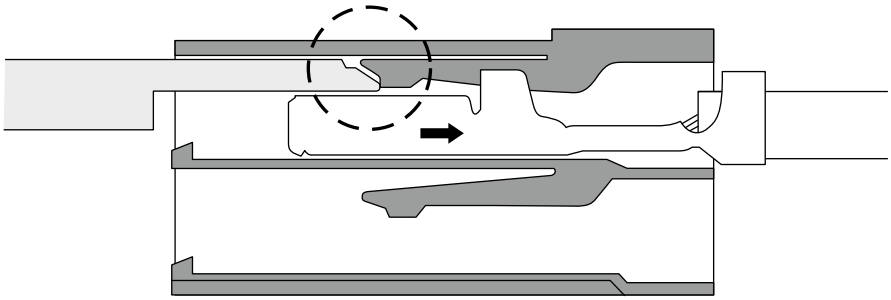
① Extractor tool is inserted into the small, upper part of the convex hole in the housing as shown in the diagram (please hold the tool the right way up)



② The tip of the tool lifts the housing lance and frees the contact



③ Contact can be withdrawed

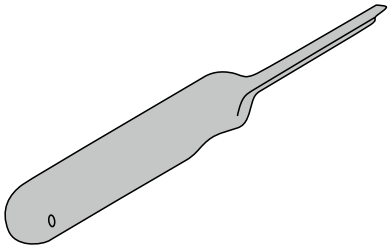


* Take care not to insert into the Contact Section. If you have inserted by error, replace the damaged contact with a new one before proceeding.

# Applicable Tools

### Extraction Tool for D-5000 Series

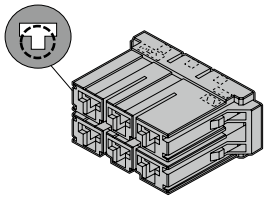
A tool for pulling out terminals from cable's crimping plug/socket housing. (When inserting, please note that the positioning dowels of D-3 and D-5 are opposite up and down.) Only D-5 terminals can be pulled out with a tool such as a small flathead screwdriver or awl.



Part Number: 409158-1
Operation Manual: 411-5774

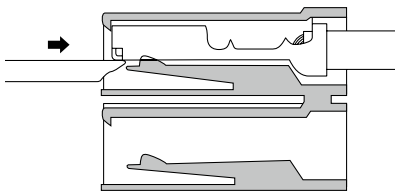
## Using the extractor

① The pulling tool should be inserted into the narrow part of bottom, with convex hole in the housing as shown in the diagram.

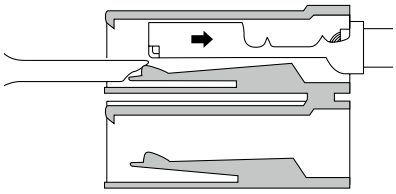


### If using the D-5 Extraction Tool

② The tip of the tool lifts the housing lance and frees the contact

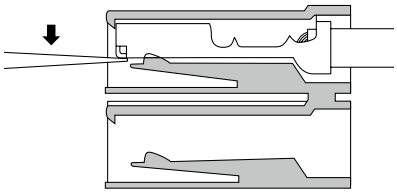


③ Contact can be withdraw

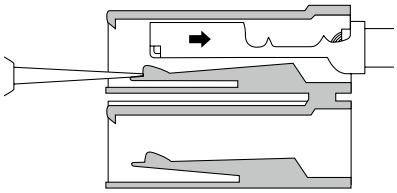


### If using a small O-driver or awl

② The tip pushes down the lance part and frees the contact



③ Contact can be withdraw



## Unplugging tool D-7000 series

Part Number: 2040080-1
Operation Manual: 408-78147



Please be sure that it is not inserted into the terminal position. If it is inserted incorrectly, replace the terminal with a new one.

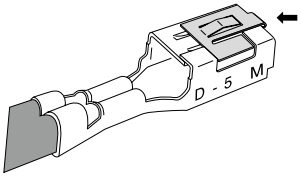
## Crimping Oil

Part Number:939691-1

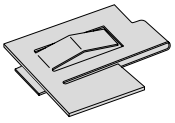



For easing the friction between tool and contact during crimping

## Sequence clip




- First "On" / then "Off"
- Applicable to the D-5 terminal only



Part Number:179993-1

# Accessories

### L-bracket D-3000

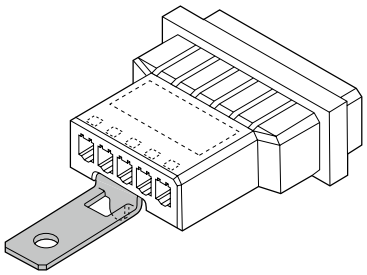
Used to fix the air-to-air housing of the plug to the panel surface.
Model: 5900121-2(S)
5900121-4(L)



Part Number:5900121-2 (S)

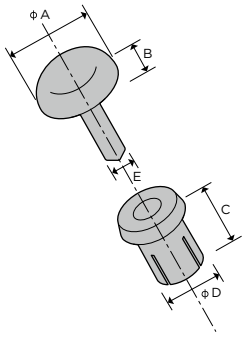


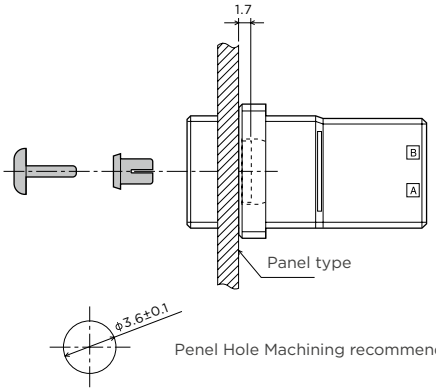
Part Number:5900121-4(L)



### Push rivets

Used to secure panel-type tab housings onto panels (Use as a handy mounting hard ware.
Cannot be used with larger sized housings or those that are frequently inserted and withdrawn).

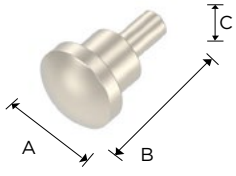



| Part Number | Panel Thickness | Dimensions | | | | | Insertion Strength | Retention Force |
|---|---|---|---|---|---|---|---|---|
| | | | B | C | D | E | | |
| 900128-1 | 0.3-1.3 | 6.4 | 1.6 | 4.5 | 3.5 | 1.95 | 19.6N-29.4N | 127.4N Min.* |
| 900128-2 | 1.3-2.3 | | | 5.5 | | | | |

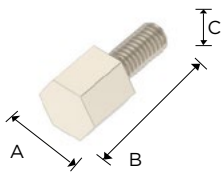
*When using 2

### Panel Mounting Screws D-2000, D-3000




| Part Number | Dimensions | | |
|---|---|---|---|
| | A | B | C |
| 900167-1 | 9.0 | 10.3 | M3 |

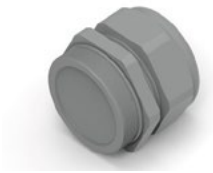
### Panel Mounting Hex Screws D-2000




| Part Number | Dimensions | | |
|---|---|---|---|
| | A | B | C |
| 1376059-1 | 5.5 | 12.3 | M3 |

# Cable Glands

## Plastic Gland



Material: PA
Press seal material: PA
Seal material: EPDM
Temperature range: -40°C~+100°C
Protection: IP68

| Metr. | Dimension D | | SW | Type | Part Number | Color of Housing |
|---|---|---|---|---|---|---|
| | Minimum | Maximum | | | | |
| M20*1.5 | 5 | 9 | 24 | HSK-M20B-H | T3209201112-001 | Black |
| | 6 | 12 | | HSK-M20B | T3209201122-001 | |
| | 8 | 14 | 27 | HSK-M20B-D | T3209201102-001 | |
| | 5 | 9 | 24 | HSK-M20G-H | T3209201212-001 | Grey |
| | 6 | 12 | | HSK-M20G | T3209201222-001 | |
| | 8 | 14 | 27 | HSK-M20G-D | T3209201202-001 | |

## Metal Gland



Material: Nickel plated brass
Press seal material: PA
Seal material: NBR
Temperature range: -40°C~+100°C
Protection: IP68

| Metr. | Dimension D | | SW | Type | Part Number |
|---|---|---|---|---|---|
| | Minimum | Maximum | | | |
| M20*1.5 | 5 | 9 | 22 | DLX-20-MT | T3609200112-000 |
| | 6 | 12 | | DLX-20-M | T3609200102-000 |
| | 10 | 14 | 24 | DLX-20-MB | T3609200122-000 |

## EMC cable glands



Material: Nickel plated brass
Press Seal Material: PA
Temperature range: -40°C~+100°C
Protection: IP68

| Metr. | Dimension D | | SW | Type | Part Number |
|---|---|---|---|---|---|
| | Minimum | Maximum | | | |
| M20*1.5 | 5 | 9 | 24 | DLX-20-MTC | T3707200113-000 |
| | 7 | 12 | 22 | DLX-20-MC | T3706200103-000 |

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AK 07/24

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